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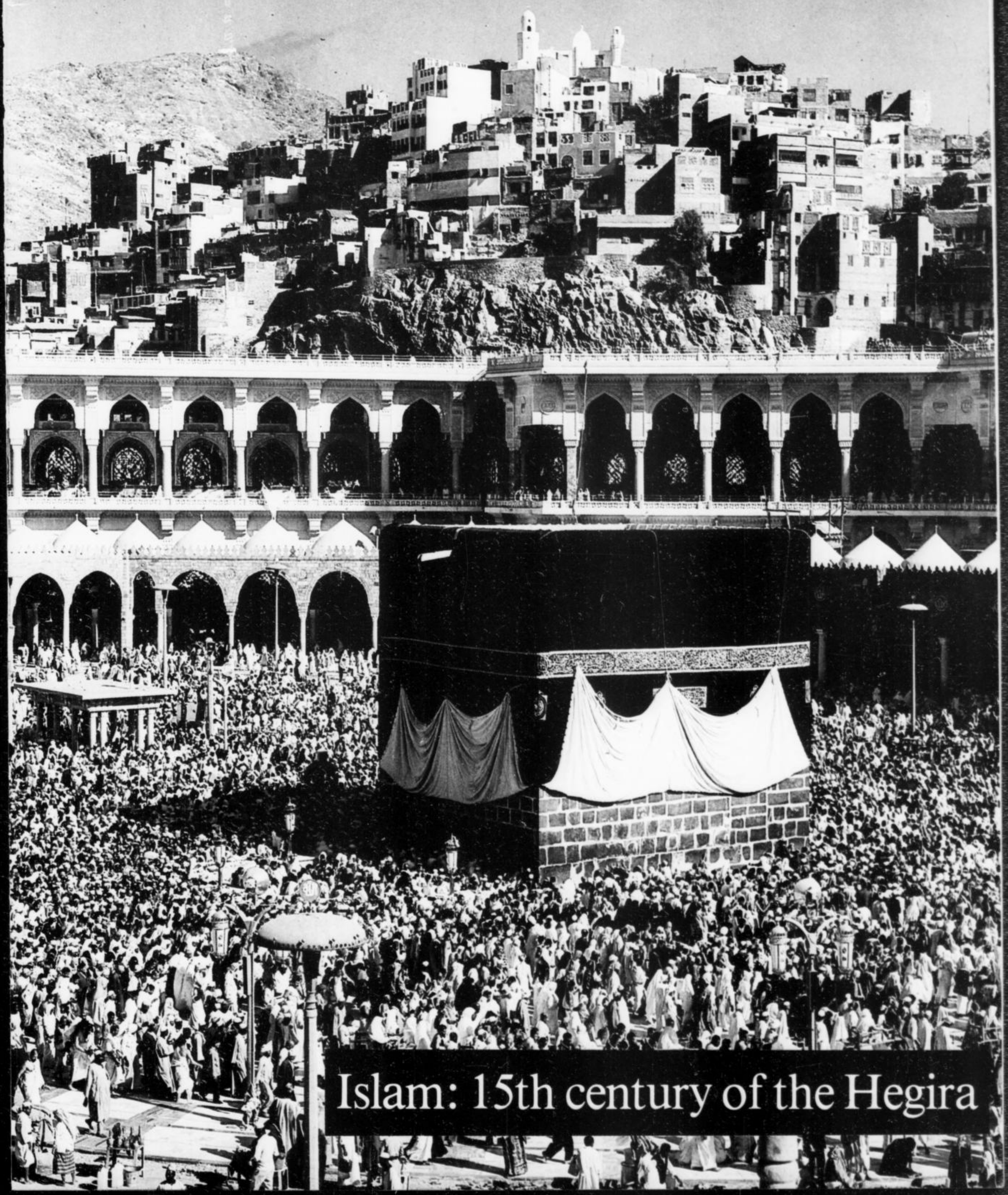
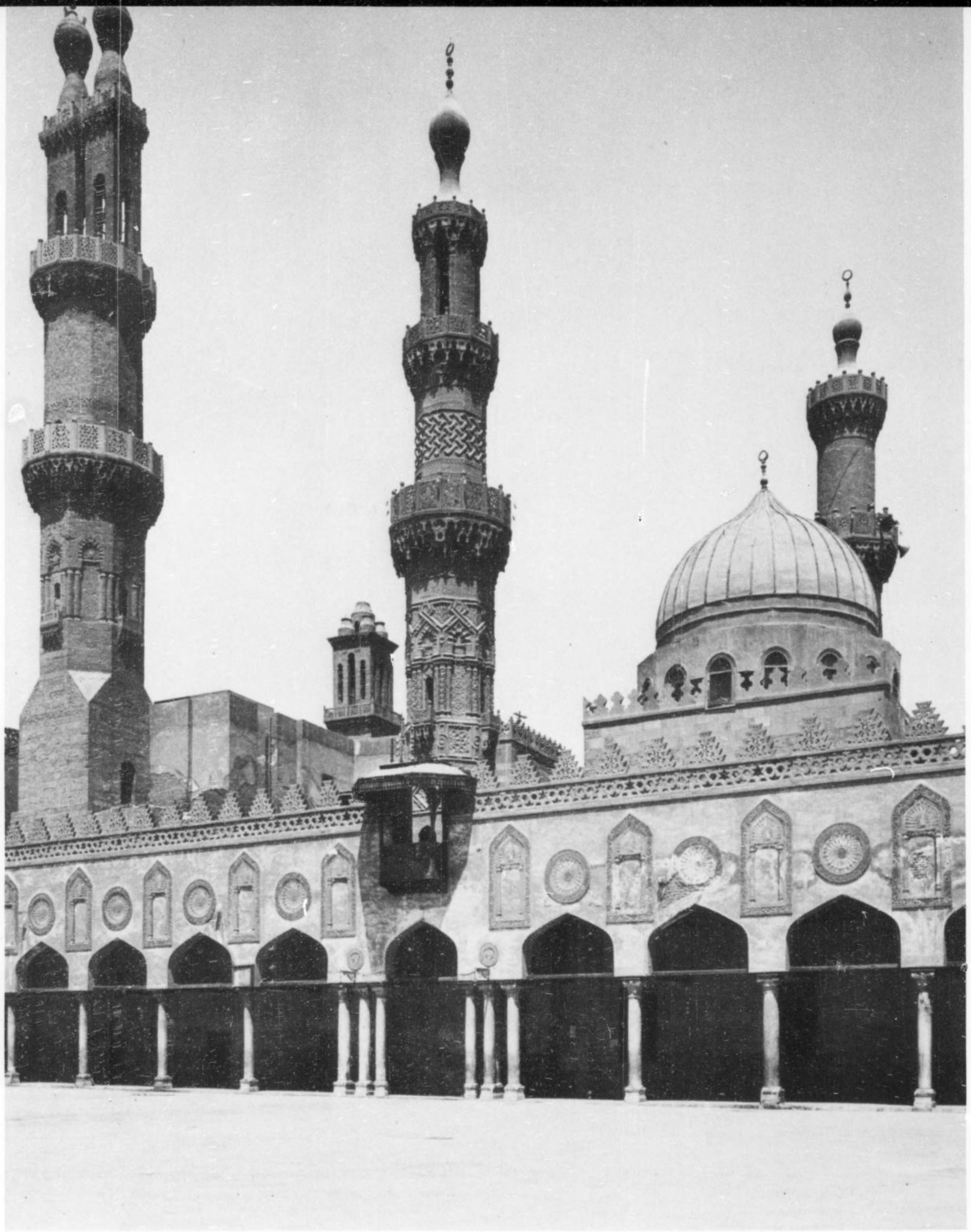


Islam: 15th century of the Hegira



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TREASURES
OF
WORLD ART

165

Egypt

Religion, way of life, culture and civilization—Islam englobes every field of human activity in a unifying vision. The search for knowledge, set forth as man's bounden duty by the Qur'an, is a dynamic force in this grand design and education has always been of central importance in Islamic society. Learning was imparted in the Madrasahs, educational institutions associated with the mosques. Above, the mosque of al-Azhar in Cairo. Inaugurated by the Fatimids on 7 *Ramadan* 361 (22 June 972 AD) it became the nucleus of one of the Islamic world's most outstanding universities. Al-Azhar, which each year awards thousands of degrees in such varied disciplines as theology, Arabic, medicine, the sciences, and architecture, has for centuries made a brilliant contribution to the spread of Islamic learning.

The Unesco Courier

A window open on the world

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page

5 At the dawn of the fifteenth century of the Hegira
THE MESSAGE OF ISLAM
by Amadou-Mahtar M'Bow

6 **THE MESSENGER OF GOD**
by Muhammad Hamidullah

8 **ISLAM'S HOLY BOOK**

9 **THE SUNNA: THE GUIDING VOICE OF TRADITION**

13 **THE WORLD OF ISLAM**
In words and pictures

14 **A UNIVERSAL MISSION**
by Habib Chatty

23 **IBN BATTUTA**
Around the world in thirty years

28 **MUSLIMS OF THE SOVIET UNION**
by Ziyauddin Babakhan

30 **RENEWAL AND REFORM IN INDONESIA**
by Siti Baroroh Baried

32 **THE IMPACT ON BLACK AFRICA**
by Sulayman S. Nyang

34 **TEACHERS, DISCIPLES AND THE ETHICS OF LEARNING**
by Mohammed Allal Sinaceur

43 **THE HEGIRA**
by Hakim Mohammed Saïd

44 **THE SCIENTIFIC ACHIEVEMENT OF EARLY ISLAM**
by Abdul-Razzak Kaddoura

50 **UMMAT UL-ILM**
Towards a Commonwealth of Science
by Abdus Salam

56 **THE DYNAMIC OF ISLAMIC THOUGHT**
by Abdel Majid Meziane

63 **THE EYE OF THE HEART**
Mysticism in Islam
by Rahmatullah

67 **MYSTIC VOICES**

68 **A NEW ARCHITECTURE ROOTED IN TRADITION**
by Dogan Kuban

78 **BOOKSHELF**

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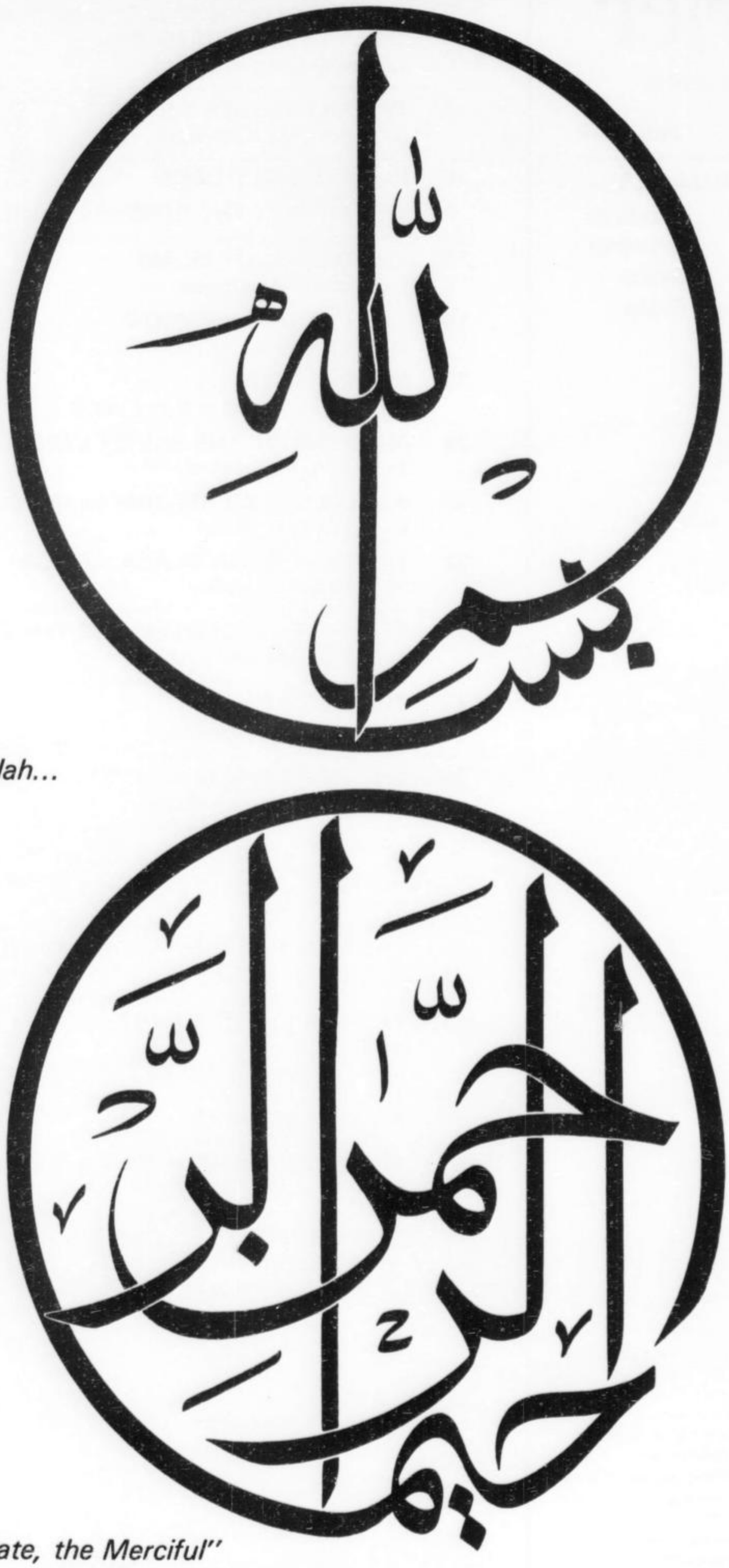
No. 8 - 1981 - OPI - 1 - 379 A

Cover

At the dawn of the fifteenth century of the Hegira, this double issue of the *Unesco Courier* highlights some of the basic facets of the thought and spiritual ideals of the Islamic community, which embraces almost a fifth of humanity. The geographical and cultural diversity of this vast community bears witness to the universality of the Islamic message and civilization. Our cover shows the Ka'ba sanctuary in the Haram mosque at Mecca, the religious heart of Islam.

Photo Abdelaziz Frikha © Sud Editions, Tunis



"In the Name of Allah...

...the Compassionate, the Merciful"

This invocation, the *Bismillah al-Rahman al-Rahim*, appears at the beginning of every *Surah* (section) of the Qur'an (with the exception of the ninth) and is pronounced by Muslims before any important act or undertaking. All believers, whatever their native language, must recite in their prayers a few verses of the Qur'an in the original Arabic, and the Bismillah is therefore every day on the lips of millions of men and women throughout Islam. The Arabic word *Islam* means "submission" (to God), and *Muslim* means "one who performs the act of submission". In its wider signification *Islam* has also come to denote a vast cultural complex embracing millions of people bound together by a common faith and a sense of belonging to a single community. Above, XIV/20th century (1) calligraphies of the *Bismillah* by Jalil Rassouli.

(1) Throughout this issue of the *Unesco Courier* dates are given, where appropriate, according to both the Islamic and the Gregorian calendars. The Islamic date is given first. (See also box on the Islamic calendar page 43).

Calligraphies from *Le Soufisme* by Laleh Bakhtiar © Editions du Seuil, Paris

At the dawn of the fifteenth century of the Hegira

The message of Islam

by Amadou-Mahtar M'Bow
Director-General of Unesco

IT is fourteen hundred years since the Prophet Muhammad, who for ten years had been calling upon the people of Mecca to walk in the way of God, found himself forced into exile.

In Mecca he had gathered about him a group of faithful followers but had also made unrelenting enemies who, after vainly trying temptations and threats, planned to murder him. He therefore decided the time had come for his community to leave. Accompanied by the loyal Abu Bakr, he set off in secret one evening from the town, arriving at last, after a long and dangerous journey across the desert, in Yathrib, where his companions had gone before and where the villagers welcomed him with open arms.

Of this humble settlement the Prophet made Medina, the town of towns which was to become the second of the holy cities of Islam, and this small oasis he made the point of departure for a new civilization.

The epic story of the exodus, or Hegira, contains several clues as to why the message brought by Muhammad came to be identified, after him, with the hopes of so many peoples, adding a new spiritual, ethical, political and social dimension to their lives.

The first significance of that message is its universality; it was by addressing themselves to the whole man and to all men that the Prophet and his companions were to build a new society, that the first Caliphs were to carry Islam beyond the boundaries of the Arabian Peninsula, and that their successors were later to spread its influence over a vast area linking Asia, Africa and Europe.

The message proclaimed by the Prophet indeed radically widened the spiritual horizons of the peoples that received it, illuminating their lives with a faith transcending the contingencies of everyday experience, placing political matters on an ethical basis and ensuring the full rights of every individual within the community.

For the freedom of the Muslim community is a fabric of which the warp and weft are individual freedoms, that can only flourish if the whole community flourishes; when the latter is threatened or attacked, each individual is affected or hurt in his innermost being; and when its members are prevented from living their lives fully by participating freely in the life of society, that life is inevitably impoverished and society ceases to be itself.

The rights of each individual proceed from the absolute equality of all before God. "You are all equal as the teeth of the comb", said the Prophet. This basic equality, unaffected by the privileges of birth or the vagaries of fortune, implies a legal and moral responsibility equal for all. Hence, each is answerable to God and to men for his own conduct and for the conduct of the community's affairs.

Islam breathed upon worlds which had previously been worlds apart in history, geography, language and culture the unifying breath of a shared hope which drew them closer together in many ways, setting up a constant current of mutually enriching, cross-fertilizing exchanges.

At the same time, Islam was receptive to the knowledge to be obtained from all the cultures it came across in the course of its expansion. The Prophet advised believers to seek knowledge "from the cradle to the grave" and for that purpose to go "to China if need be"; Islam, starting out with a unique vision, consequently developed an aptitude for taking the accumulated intellectual wealth of the peoples sharing the same faith and the main elements of the rest of the world's stock of knowledge and combining them into an integral whole.

The teachings of Islam have thus kept an ever-renewed relevance; and the epic adventure of the Hegira, during which these teachings took shape, has continued to inspire minds and hearts. Muslims today recall the many episodes of that story as if they were about people but recently departed from this life whose memory remains very dear to them, whose words and deeds still have the power to move them deeply, and whose example continues to inspire their thoughts and actions.

They recall the moving story of how the companions of the Prophet entered Medina and of the brotherly welcome which the Partisans accorded to them, receiving them into the bosom of their families and sharing their homes and their belongings with them. They then find themselves dreaming, in the here and now, of another such surge of solidarity between peoples, each feeling others' needs as his own and all who enjoy plenty stretching out the hand of friendship to those stricken by war, by want, by ignorance and disease.

Muslims also tell how once the Prophet was explaining his plan for an impending battle. One of his companions having asked whether this plan partook of Revelation or stemmed from his own understanding, the Prophet replied that it was the fruit of his own deliberation. The companion then gave his own views on the battle plan and finally persuaded the Prophet to change it. Then the Muslims of today all find themselves dreaming of such another climate of cordial brotherhood as would allow the lowliest to express himself fearlessly before the most highly respected, in that atmosphere of mutual tolerance which is the essential prerequisite of democracy for all.

Muslims yet again tell of the Caliph Umar, the spiritual and temporal head of a by now immense Islamic State, who, being overcome by weariness, lay down in the shade of a palm tree where one of his subjects, seeing him, stopped and addressed to him these infinitely tender words: "Thou hast accomplished thy public duties, Omar, thou hast served justice and with a heart set at rest thou hast fallen to sleep". Who can help but dream, today, of the renewal of that same sense of equality whereby the ruler would be a man among men, so devoted to the good of his fellows that each of them would, in turn, feel a little responsible for him?

These values of freedom, responsibility and solidarity enlightened and purified by faith, are as essential to man today as in the days of the Prophet. Now as in the past and in the future, they offer man an ideal to live by, such that his highest spiritual aspirations irradiate the humblest acts of his daily life.

■ **Amadou-Mahtar M'Bow**

The Messenger

by Muhammad Hamidullah

ONE night in the month of Ramadan in the year 609 AD, Muhammad Ibn Abdallah Ibn Abd al-Muttalib Ibn Hashim, the future Prophet Muhammad, had a vision in the cave of Hira near Mecca. A voice said: "I am Gabriel, the angel sent by God to announce to you that you have been appointed by God to communicate His messages, His revelation to humanity."

The first revelation he received was this:

"Recite in the name of your Lord, the Creator,
Who created man from a clot of blood.
Recite! Your Lord is the most bounteous One
Who by the pen has taught,
Taught man things which he did not know."

These words form the first five verses of the 96th chapter of the Qur'an, the Holy Book of Islam, which contains this and the many other revelations Muhammad would receive in the course of the next twenty-three years before his death (see page 8).

Mecca, the birthplace of Islam, was at the beginning of the seventh century AD a prosperous trading centre with some 10,000 inhabitants. It stood at the cross-roads of several major trade-routes, which traversed the Arabian peninsula, which itself stood at the confines of the two most powerful empires of that time: The Persian Sassanid empire to the north-east, and the Byzantine empire to the north and west (Syria and Egypt).

Through Mecca passed caravans transporting the most precious commodities of the age: silk from China, spices from India, and perfumes from the Yemen, *en route* for Byzantium and the rest of Europe. It was a well-organized city-state with a council of ten hereditary oligarchs and with ministries responsible for justice, defence, worship, external relations, consultations with the citizens and other civic affairs. Each of these ministries was held by one of the major clans of the tribe of Quraysh, to which Muhammad belonged.

The people of Mecca had a reputation for generosity and honesty: when famine struck they fed the poor; and to protect the interests of foreigners who had been unjustly treated in Mecca they had founded an

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In the presence of the Prophet

In the following text, taken from the **Universal History** by Tabari (d. Baghdad 310 AH/923 AD), the best-known description of the Prophet's physical appearance is sketched by Ali, his cousin and son-in-law. Islamic tradition, reacting against the idolatry which prevailed in the Arabian peninsula before the coming of Islam, originally forbade the reproduction of images of living creatures, especially of man. From the time of the Abbasids this rule became more flexible, thus opening the way to the flowering of the miniaturist's art, notably in Persia and Turkey. Nevertheless, where the Prophet and some of the most revered figures of Islam are concerned, it is still scrupulously observed in the Muslim world.

Asked for details of the Prophet's external appearance, Ali said: he was of medium height, neither very tall nor very short. His complexion was pinkish white; his eyes were black; his hair was thick, glossy, and beautiful. A full beard framed his face. The hairs of his head were long, falling to his shoulders. They were black [...]. His gait was so energetic that you would have said that he tore himself from the rock with each step, and yet at the same time he moved so lightly that with each stride he seemed not to touch the ground. But he did not walk proudly, as princes do. There was so much gentleness in his face that once in his presence it was impossible to leave him; if you were hungry, you were satisfied by looking at him and thought no more of food. Any man suffering from an affliction forgot his troubles when in his presence, charmed by the gentleness of his features and his discourse. All who saw him agreed that they never met, neither before nor after, a man whose discourse was so delightful. His nose was straight; there were gaps between his teeth. Sometimes he would let the hair of his head fall naturally, at others he wore it knotted into two or four bunches. At sixty-three years, no more than fifteen hairs on his whole body had yet become white with age... ■

# of God

"order of chivalry". They believed in one God but, like most of the sedentary or nomadic peoples then living in the Arabian peninsula, they also worshipped idols which, they hoped, would intercede with the deity on their behalf. They did not believe in the resurrection or in an after-life.

Mecca was noted for a temple known as the Ka'ba which had become a major centre of pilgrimage. Reputedly built by Adam and restored by Abraham. the Ka'ba was a cubical building, adorned all around with 360 idols. The Virgin Mary and the infant Jesus were among the figures depicted on frescoes inside. A black stone in one corner of the Ka'ba was the object of particular veneration: it marked the spot where the ritual procession around the temple began, and on it pilgrims swore fidelity to God. The annual pilgrimage to the Ka'ba attracted crowds of worshippers from all over the Arabian peninsula.

The overwhelming majority of the people of Mecca, including Muhammad, were illiterate but they were renowned for their eloquence and appreciation of poetry. Indeed, poets from all over the peninsula came there to display their talents and earn the approval of the Meccans.

Such was the setting to which the message of Islam was first brought by Muhammad.

When he received the first revelation Muhammad was forty years old. An Arab born in Mecca into a family of merchants, he had become the leader of caravans, like his father and grandfather before him. His wife Khadijah was the widow of a merchant, and on her behalf he had journeyed to Syria, the Yemen, East Arabia (Bahrain, Oman), and possibly even as far as Abyssinia which had highly developed trading links with pre-Islamic Mecca. As a young man Muhammad had already revealed exceptional qualities which distinguished him from his fellows. In particular he had won a reputation for probity in business which earned him the name of al-Amin (worthy of confidence).

According to historians, Muhammad once bought a young slave named Zaid Ibn Harithah, whom he treated very kindly. Zaid had been captured during a war. After a long search his father, chief of a big tribe, found his son in Mecca and asked Muhammad to return the boy in exchange for a ransom. The future Prophet replied that he would free the young slave for nothing, provided that the boy willingly agreed to go with his father. Faced with this choice, Zaid at once and unhesitatingly announced that he preferred to stay with Muhammad. The latter was deeply moved and immediately set the boy free, took him to the Ka'ba and declared that he had decided to adopt his former slave as his son.

Another incident, which happened some five years before the first revelation, also sheds a revealing light on Muhammad's character. The Ka'ba had been destroyed by fire and torrential rain, and then rebuilt by the Meccans. However, just as the Black Stone was about to be returned to its place, a quarrel broke out between the different clans, each of which coveted the honour of replacing the sacred object. The issue seemed likely to be settled at swordpoint when an old man proposed that the decision be left in God's hands and that whoever came on the scene first should arbitrate the issue.

The first-comer turned out to be Muhammad, who placed the stone in a wide piece of cloth and asked a representative of each clan to lift the cloth by its edge. In this way every clan participated in the restoration of the Black Stone to its niche, where it was placed by Muhammad to the satisfaction of everyone.

It was around this time that Muhammad became dissatisfied with the worldly life around him and began to retire to spend his days in meditation, his favourite retreat being the cave of Hira. For five successive years he thus went into seclusion during the whole month of Ramadan, which then fell in mid-winter. It was during his fifth annual retreat that he had his first vision of the Archangel Gabriel.

When the vision was over, Muhammad returned home, profoundly shaken, and described his experience to his wife Khadijah. He was in a state of great agitation and feared that the angel might have been the devil in disguise. Khadijah did all she could to comfort him and the next day they both visited her cousin, Waraqa Ibn Nawfal, a blind old man who had been converted to Christianity and was versed in religious lore.

As soon as Muhammad had finished telling his story, Waraqa exclaimed: "If what you say is true, this is similar to the *Nomos* (Torah) of Moses. If God spares me, I shall defend you when the hour of your persecution comes'."

"What!" replied Muhammad. "Shall I be persecuted for having talked of God and his blessings?"

"Yes," said Waraqa, "no prophet has escaped persecution from a part of his people."

The story of Muhammad's vision spread throughout the city. The first to proclaim their faith in his message were Khadijah, the devoted Zaid, Muhammad's friend Abu Bakr, and his young cousin Ali whom he had brought up as an adopted son. Others were sceptical, if not openly hostile.

Then three years went by without Gabriel appearing again to the Prophet. Muhammad was on the verge of despair when his aunt, Umm Lahab, taunted him saying: "I am sure that your devil (Gabriel) has abandoned you and that he detests you."

This insult touched the prophet to the quick. He climbed a nearby mountain, and when he reached the summit Gabriel appeared before him, calmed him and recited to him the words of God: "By the morning hours and by the night when it is stillest, Your Lord hath not forsaken you nor doth he hate you... Therefore the orphan oppress not, the beggar drive not away, and of the bounty of your Lord be your discourse." (The Qur'an, XCIII: 1-3 and 9-11). Muhammad immediately grasped the meaning of this message ordering man to believe in God and to be charitable.

The message which Muhammad began to preach to the people of his birthplace had two main doctrines, the unicity of God and the resurrection and life after death. The idea of a single omniscient and omnipresent God, to which everyone will one day have to give an account of himself, conflicted with the idolatrous beliefs and practices of the Meccans. At first they were amused by Muhammad's teachings. Then they began to pour scorn on him. Finally they unleashed a wave of persecution against the Prophet and the small group of converts who had embraced the new religion. When it became intolerable, Muhammad advised his new companions to seek refuge in Abyssinia where a Christian king gave them asylum and protection. When the Meccans furiously sent a delegation to demand the extradition of the Muslim refugees, the Abyssinian king turned down their request.

The Meccan delegation thus returned home frustrated, and as a result the persecution of those Muslims who had remained in Mecca was stepped up.

Eventually the pagan Meccans decided to proclaim a boycott of the Prophet and his clan. All commercial transactions, including the sale of food, were forbidden, and many Muslims died during the boycott.

After three long years the Meccans lifted the embargo, but this was not the end of Muhammad's difficulties. His uncle, Abu Talib, head of the family and his protector, died, and the new head of the clan, another uncle, Abu Lahab, declared Muhammad an outlaw whom anyone could kill. Faced with no alternative but to leave Mecca, Muhammad sought asylum in the neighbouring town of Ta'if. However, the people of Ta'if turned out to be even more hostile than the Meccans and the Prophet soon returned to his native city under the protection of a non-Muslim friend, since he himself was excommunicated by his clan.

He now conceived the idea of making contact with the foreigners who came to Mecca each year on the annual pilgrimage to the Ka'ba. After many vain efforts with contingents from different tribes, a small group of people from Yathrib, later to be known as Madinat al-Nabi, "the city of the Prophet", or simply Medina, "the city" rallied to his cause and agreed to preach the message in their town. The following year twelve people ►

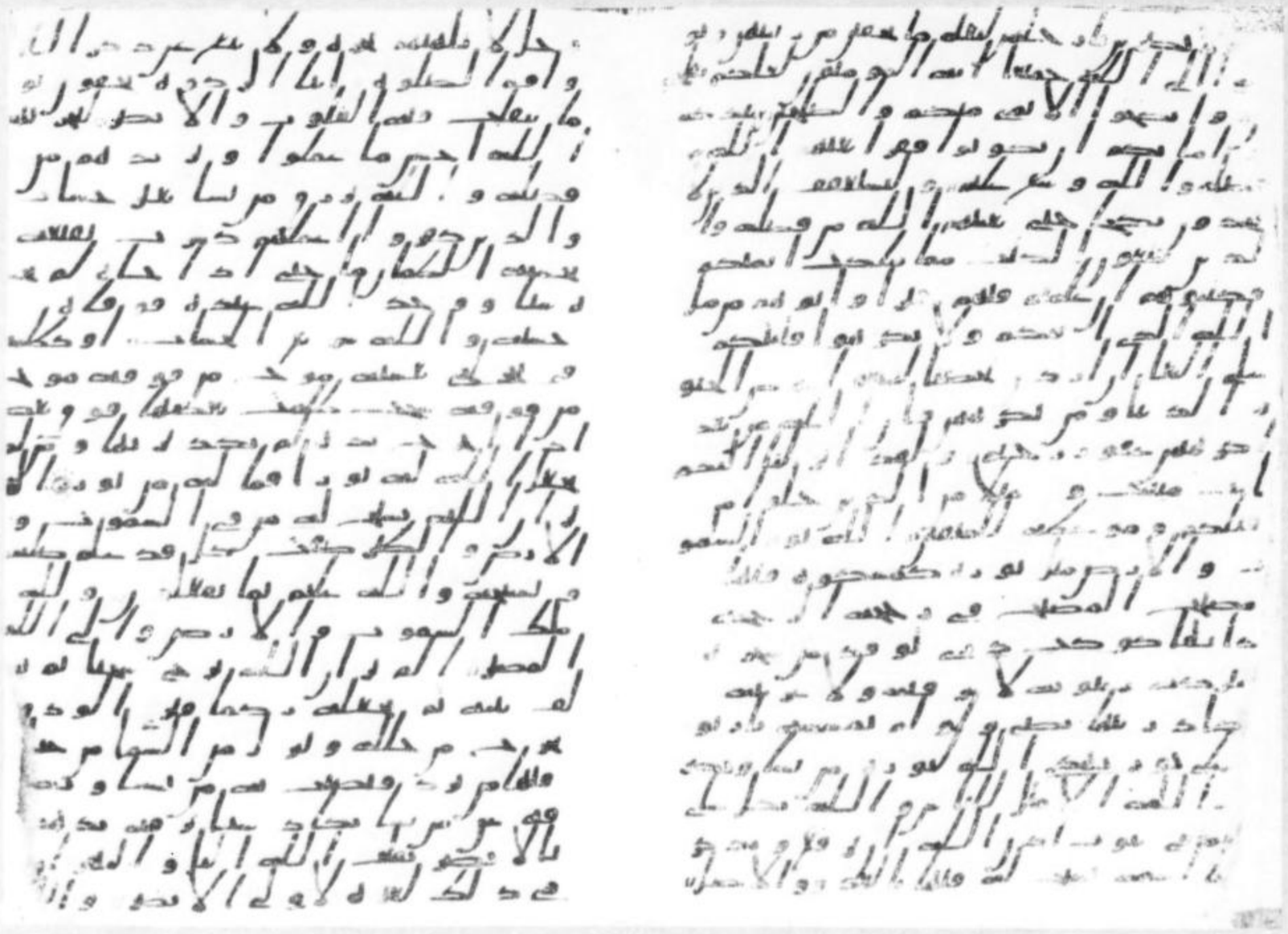


Photo © British Library, London

Left, this Qur'an was copied on vellum during the II/8th century, probably in Mecca or Medina. It is in an early Arab script called *al-ma'il* and is believed to be one of the two oldest extant Qur'an manuscripts.

Islam's Holy Book

In the name of Allah the Compassionate the Merciful
Praise be to Allah, Lord of the Creation,
The Compassionate, the Merciful
King of the Last Judgement
You alone we worship, and to You alone we pray for help
Guide us to the straight path
The path of those whom You have favoured, not of those who have incurred Your wrath, nor of those who have gone astray.

The Qur'an (the Koran) is the Holy Book of the Muslims. In Arabic, **qur'an** means "reading" or "recitation". It contains all the revelations made by God through the archangel Gabriel to Muhammad over about the last twenty years of his life.

Muhammad, for Muslims the last of the prophets and the chosen Messenger of God, described how these revelations were made in the following terms:

"They happen in different ways; sometimes Gabriel takes the form of a man who speaks to me as a man speaks, sometimes he is another kind of being with wings, and I remember all that he says. At other times, it seems as if a bell were ringing in my ears—and that is the most terrible ordeal—and when this state of ecstasy fades I remember everything perfectly as if it were engraved on my memory."

The Qur'an is written in Arabic and is divided into 114 **surahs**, or chapters, sub-divided into verses, They are of unequal length and are arranged not chronologically, but in order of decreasing length, except in the case of the first **surah** which is entitled **al-Fatiha** (the Exordium) and which has only seven verses (see above). It is considered the epitome of the Holy Book and is the only part of the Qur'an that must be recited at every prayer.

For Muslims, the Qur'an is a guide through the whole of human life, temporal as well as spiritual, individual as well as collective. It is for all men, without distinction, in all countries and for all time, since, according to the Holy Book, there will be no further revelation.

The sacred text does not follow a chronological order and the messages dictated to the Prophet at Mecca, before the **Hijra**, are interspersed with those received at Medina.

The Meccan **surahs**, which make up about one third of the Qur'an, were addressed to a hostile and pagan community and constitute a kind of ethical code that teaches charity, perseverance and purity. They also have a marked eschatological character, reminding the believers that the Last Judgement awaits them.

The Medina **surahs**, which constitute about two thirds of the Qur'an, are interspersed with legal prescriptions necessary to the communal life of the new society established in Medina.

The revelations continued to occur, until the Prophet's death in the eleventh year of the **Hijra** (632 AD).

The fragments of the Qur'an were put together under the direction of the Prophet himself. After each revelation, he dictated the words received from Gabriel to one of his literate companions, indicating the exact place this new element was to occupy in the complete work. Muhammad chose a thematic rather than a chronological arrangement; apart from some very long texts in which several problems are discussed, the chapters are generally made up of revelations from different periods but dealing with the same subject. This gives the Book a logical structure.

The work of transcription lasted for the whole of the Prophet's ministry. After his death, the community was not allowed to change the long sequence of Qur'anic revelations either by addition or suppression.

The task of establishing a complete and definitive version of the Qur'an in a single book devolved upon the Prophet's successors. Since paper was unknown at that time to the inhabitants of the Arabian peninsula, the first Muslims in Mecca and later in Medina recorded the revelations on crude and perishable materials —pieces of leather, wooden tablets, the shoulder-blades of camels, date fibre, soft stone, etc. The texts thus recorded were often fragmentary and showed certain divergencies.

The text of the Qur'an was also preserved by the **hafiz**, believers who had learned it by heart from the mouth of the Prophet. After his death many of them perished during the wars of apostasy, which broke out when certain Muslims rejected Islam and refused to pay the compulsory alms, or **zakat**. In order to safeguard the Qur'an and complete the verification of its text by those **hafiz** who were still alive, the first Caliph, Abu Bakr, on the advice of Umar (who was later to succeed him), commanded that the various fragments be assembled into a single work. It is said that Umar himself wrote down the sacred text in one volume. But it was the third Caliph, Uthman, who reigned from 23 to 36 AH (644 to 656 AD), who drew up the complete and official version of the Qur'an.

The Qur'an established not only a religion but also a language—Arabic.

In Muhammad's time a large number of Semitic dialects were spoken in the Arabian peninsula. The divine revelation was made in the idiom of the powerful Quraysh tribe and thus the Arabic language became a vehicle of civilization for hundreds of millions of people. The first known book in Arabic, the Qur'an is an inspired text of great formal perfection. It is written in prose although some of its verses rhyme.

Although it has been translated into nearly all languages, Muslims throughout the world must recite in their prayers a few verses from the Qur'an in the original Arabic.

*(Unless otherwise stated, quotations from the Qur'an appearing in this issue of the **Unesco Courier** are taken from the English translation by N.J. Dawood).*

from Medina came to Mecca at the time of the pilgrimage and declared their conversion to Islam. When they returned home they were accompanied by a missionary from Mecca who had been instructed by the Prophet to preach Islam in Medina.

The missionary was so successful that the next year dozens of converts came to Mecca from Medina and invited the Prophet and all persecuted Muslims to emigrate to their town. Muhammad accepted, but first he asked the Muslims in Mecca to go to Medina in small groups because if they migrated *en masse* the people of Mecca would probably molest them. So secretly, in small groups, they went.

As more and more Muslims left Mecca, the Meccans became afraid that if Muhammad too found refuge elsewhere he would eventually return with his hosts and attack his native city. And so they decided to assassinate him. When news of the plot reached Muhammad, he went to his friend Abu Bakr and they both decided to leave Mecca under cover of darkness and go to Medina. Abu Bakr engaged a man to bring two camels to their hiding place and to guide them by unfrequented routes. After many adventures they arrived safely in Medina, to the joy of the Muslims who were already there.

This event, the Hegira (in Arabic, *Hijra*), is the starting point of the Islamic calendar which has now ended fourteen centuries. Before it, life was full of difficulties for Islam; after it, in Medina, there came a time of relative security and progress which permitted the establishment of an Islamic State.

Muhammad was a practical man. He wanted to establish how Muslims should act in every aspect of their existence—in their spiritual and personal lives and also in their political lives as members of the community. In Medina he embarked on this great task.

The first problem facing him was that of the refugees. He suggested that each wealthy Medina family should fraternize with a family of Meccan refugees; the two families should work together, earn together, and live together as a single family. The Medina Muslims agreed and in this way the problem of the refugees was soon solved.

The next problem was that of security. On the Prophet's arrival, there was a political vacuum in Medina, which consisted merely of a number of warring clans who recognized no ruler and no form of state authority. Muhammad called together representatives of all the population—Muslims, idolatrous Arabs, Jews and Christians—and proposed the establishment of a city-state whose strength would deter anyone who might think of attacking it. The proposal was accepted, and Muhammad was himself selected as head of the new state.

As head of state his first measure was to draw up a constitution. The text, which has survived to the present day, is the world's first known example of a written constitution. It defines the rights and duties of the head of state and his subjects, and makes provisions for defence, justice, social insurance and other needs. The hallmark of the constitution is tolerance in the widest sense. Under it everyone, Muslim and non-Muslim alike, is to enjoy not only liberty of conscience but also liberty of law and justice: Muslim law was applied to non-Muslims neither in civil nor penal cases.

Muhammad next began to organize the security of the Muslim state by making a series of defensive alliances with the tribes which lived around Medina. Strengthened by these alliances, he forbade the Meccan caravans travelling to Syria, Egypt or Iraq to cross Islamic territory. When the Meccans tried to force their way through they found their way blocked by bands of Muslims three and sometimes ten times fewer than their own forces. The great victory at the battle of Badr (year 2 of the *Hijra)* was won, for

The Sunna: the Guiding Voice of Tradition

The **Sunna** (the word means custom, use and wont) comprises the deeds and utterances of the Prophet Muhammad and acts and sayings to which he gave his unspoken approval during his ministry.

Second in authority only to the Qur'an, it consists essentially of the Prophet's commentaries on the Qur'an and of rules of conduct laid down for the entire Islamic community.

Known also as the **Hadith** (tradition of the Prophet), the **Sunna** was the source of a host of practical rules by which judges were guided during the earlier centuries of Islam before the codification of the corpus of Islamic law. Even today it continues to be a source of law in many countries which apply, whether wholly or in part, the **Shari'a,** or Holy Law of Islam.

Muhammad made a clear distinction between the Qur'an, the word of God dictated to him by the angel Gabriel which could not be altered even in the slightest detail, and the inspiration which prompted him in his daily life to words or acts approved by God. Sometimes a revelation would correct a decision made by the Prophet himself. The Prophet personally supervised the collation of the Qur'an, but not of the **Hadith.**

At first, the **Sunna** was handed down from memory by the companions of the Prophet. Some of them, like Abd'Allah Ibn Amr and Anas Ibn Malik, noted down the Prophet's words and actions during his lifetime, others did so only after his death. Most of them, however, passed on their knowledge orally to their disciples. Sometimes, to resolve a legal or moral problem, a precedent would be sought in the life of the Prophet on which a decision could be based.

The early generations of Muslims felt the need to collate and authenticate the **Hadith** of the Prophet. Many "traditionists", or scholars of the **Sunna**, set out to collect the oral traditions, often travelling great distances to receive them at first hand from those to whom they had been directly transmitted.

The body of the Tradition soon swelled considerably. In some cases **Hadith** were invented to give credence to a particular view or doctrine, and in others, through an excess of piety, edifying sayings or moral teachings were falsely lent the authority of the Prophet's name.

Towards the second century of the **Hijra,** therefore, it became essential to authenticate each **Hadith** by establishing a chain of transmission beginning with the last authority and ending with the original authority, a task which developed into a discipline in its own right. Biographical studies were made of the people who figured in these chains of transmission in which their antecedents, ideas, doctrines and degrees of honesty were examined so as to allow an assessment to be made of the reliability of their words.

Thus every **Hadith** came to consist of two parts—the **Isnad**, which consisted of the names of the persons who handed on the substance of the tradition to one another, and the **Matn**, or text of the tradition itself, as in the following example:

(i) **Isnad:** Al-Homaidi told us that according to Sufian, on the authority of Yah'ya Ibn Said el-Ansari, that Muhammad Ibn Ibrahim at-Taimi had informed him that he had heard Alqama Ibn Waqqas al-Laithi say: "I heard Umar Ibn Khattab" (may God be pleased with him) say from the **minbar** (pulpit) that he had heard the Messenger of God (peace be upon Him) express himself in these words:

(ii) **Matn:** "An action can be judged only by its intention."

Six great collections of **Hadith** are recognized as authoritative—the **Sahih** (authentic collections) of al-Bukhari and of Muslim, and the **Sunan** (traditions) of Abu Dawud, al-Tirmidhi, al-Nasa'i and Ibn Madja, all of which were compiled during the 3rd century of the **Hijra** (9th century AD).

example, by some 300 Muslims pitted against some 950 pagans.

As the years went by, Mecca began to show signs of economic exhaustion. Muhammad generously offered a truce but when it was violated by the Meccans he occupied their city without a blow being struck. His first decision was to proclaim a general amnesty which affected the Meccans so profoundly that most of them were converted to Islam overnight.

With the conquest of Mecca, the Prophet's hands were freed to deal with the Byzantine empire which was hesitating neither to assassinate Muslim ambassadors nor to put to death those of its subjects who embraced Islam. He could also pay attention to the rest of the Arabian peninsula, from where scores of delegations came to Medina to declare their conversion.

Two years later he again went to Mecca to perform the pilgrimage of the House of God, that culminating and final element of the edifice of Islam. His mission on earth had been accomplished: three months later he breathed his last.

By the time of his death in 11 AH/632 AD the whole of the Arabian peninsula as well as the southern parts of Palestine and Iraq had been converted to Islam. The Islamic state which had been born in a part of the town of Medina in year 1 of the *Hijra* had expanded to cover three million square kilometres and was endowed with the financial, military, educational, administrative, judicial and other institutions necessary for its survival and development.

Before he died he had summed up the basic duties of Islam: acceptance of the confession of faith ("There is no God if not God and Muhammad is the Messenger of God"); saying daily prayers to God; paying tax *(Zakat)*; the pilgrimage to Mecca; and fasting during the month of Ramadan. These five pillars of faith, where material and spiritual mingle in a single balanced whole, remain today the foundations of Islam.

■ **Muhammad Hamidullah**

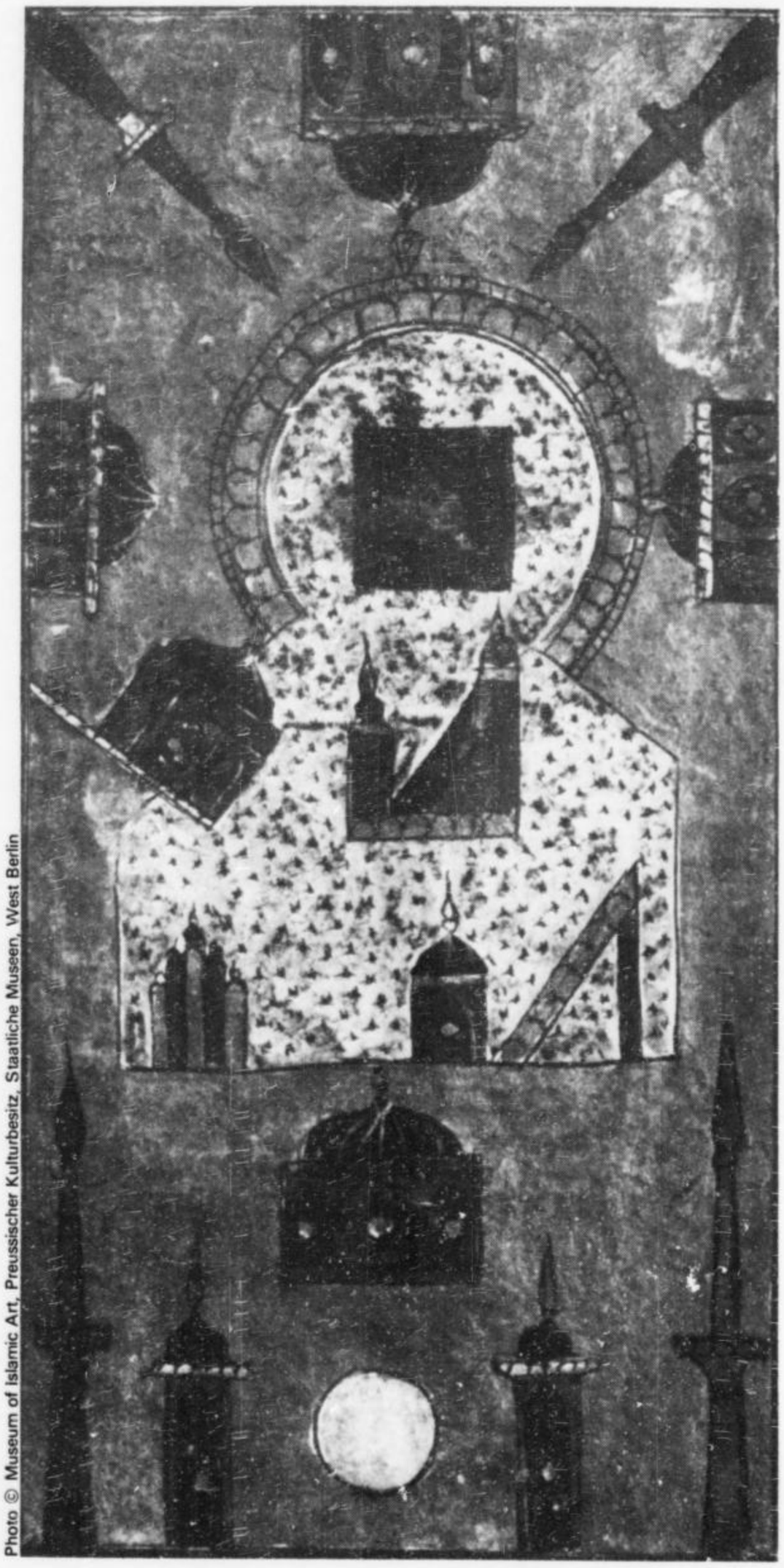


Photo © Museum of Islamic Art, Preussischer Kulturbesitz, Staatliche Museen, West Berlin

Mecca

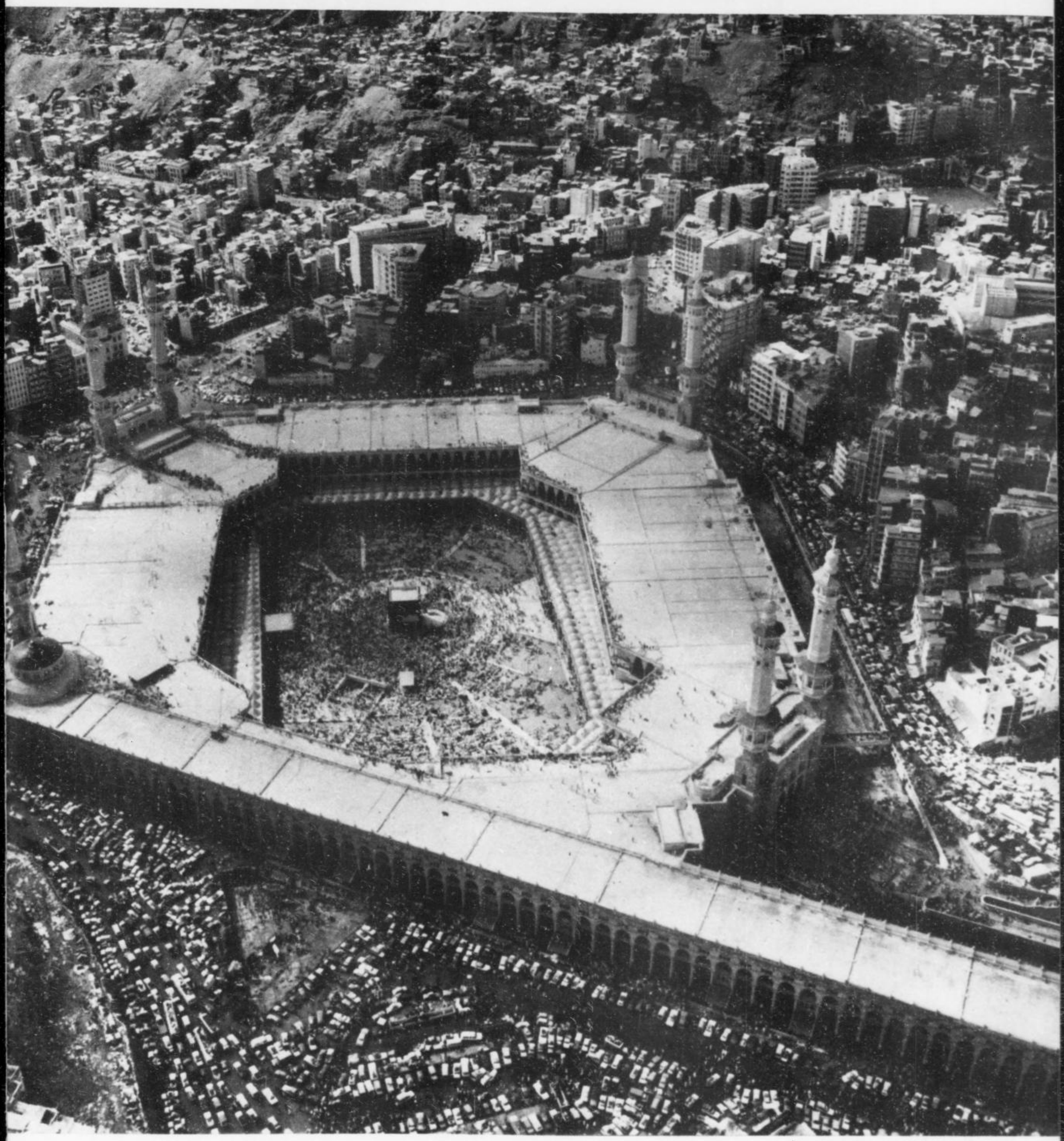
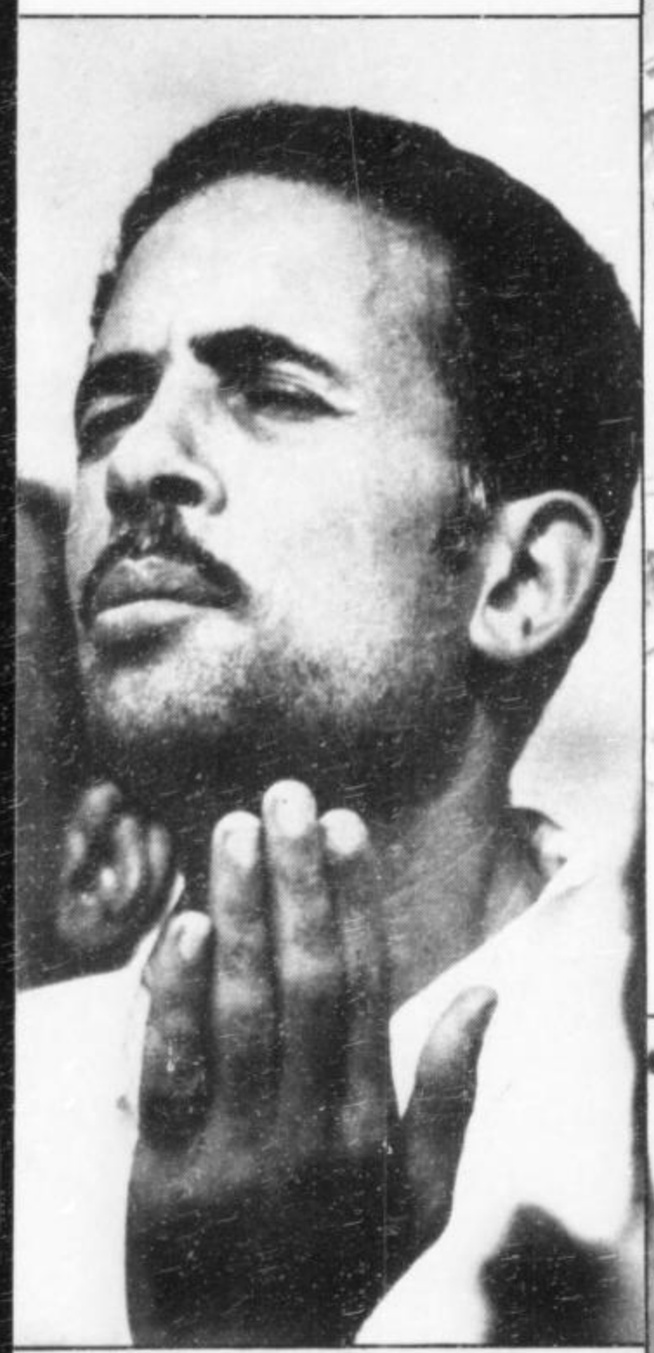


Photo Abdelaziz Frikha © Sud Editions, Tunis

Mecca is the birthplace and the heart of Islam and the Ka'ba sanctuary its most holy shrine. Five times a day, every day, millions of Muslims throughout the world turn towards Mecca as they recite the prescribed prayers; and it is to Mecca that, for fourteen centuries, Muslim pilgrims have come to perform seven ritual circumnambulations of the Ka'ba, to kiss the Black Stone, and to walk seven times between two mounds, al-Safa and al-Marwa, within the precincts of the mosque. The *salat*, or daily prayer, and the *hajj*, the pilgrimage to Mecca that every Muslim who has the material means to do so is called upon to make once in his lifetime, are two of the five "Pillars of Islam", which are a summary of the basic features of Muslim religious beliefs and duties. The other three pillars are the *shahada*, the profession of faith, the *zakat*, alms-giving, and the *siyam* or fasting. Above, an aerial view of the Great Mosque at Mecca, with the Ka'ba sanctuary in the centre of the courtyard. Tradition has it that the Ka'ba (the word means "cube" and is an allusion to the shape of the building) was built by Abraham and his son Ishmael. The *Hajar al-Aswad*, or Black Stone is built into the eastern corner of the Ka'ba about one and a half metres from the ground. One tradition holds that the Black Stone was brought to Abraham by the angel Gabriel and was originally white, acquiring its present colour through contact with impurity and sin during the pagan period. Another account states that the Black Stone fell down from heaven. The Ka'ba is covered with a *kiswah*, or vesture, made of black cloth with gold lettering, which is renewed every year. The interior of the Ka'ba, to which access is strictly limited, is bare. Three wooden pillars support the roof and the only furnishings are a number of gold and silver lamps. Left, an Ottoman style illuminated design (XII/18th century) representing Mecca. It is a companion piece to the representation of Medina reproduced in colour on page 42.



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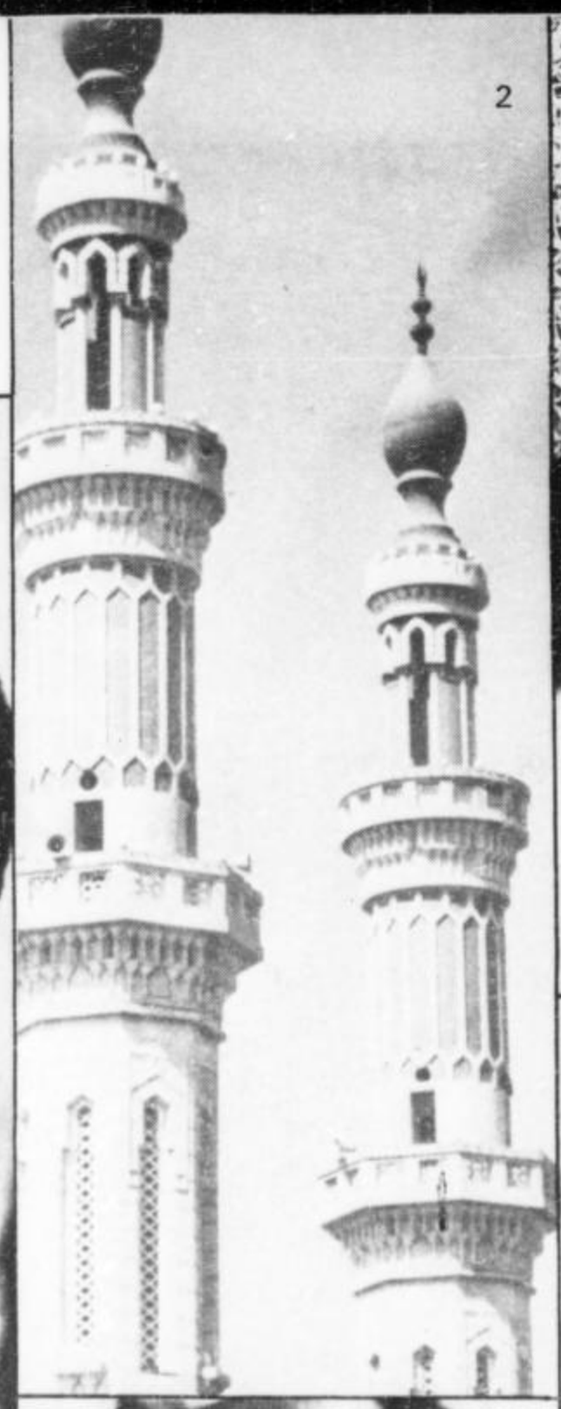

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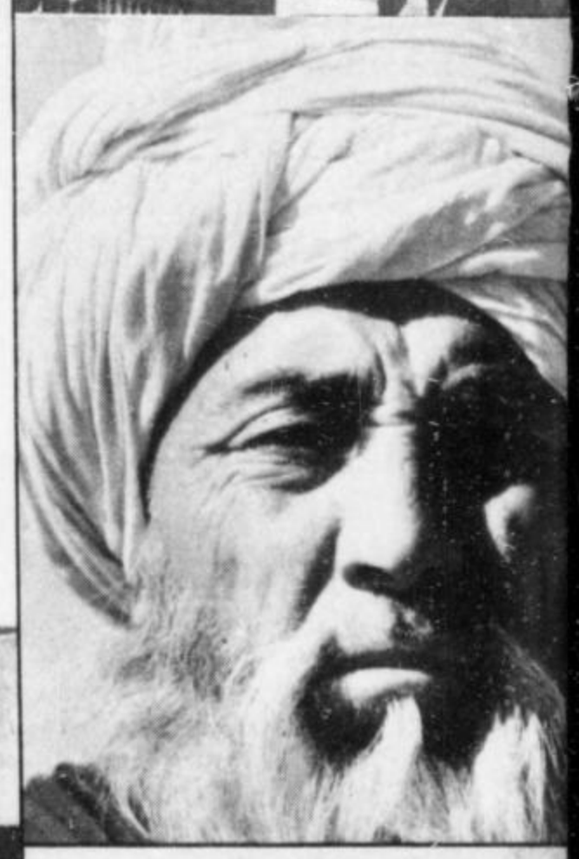

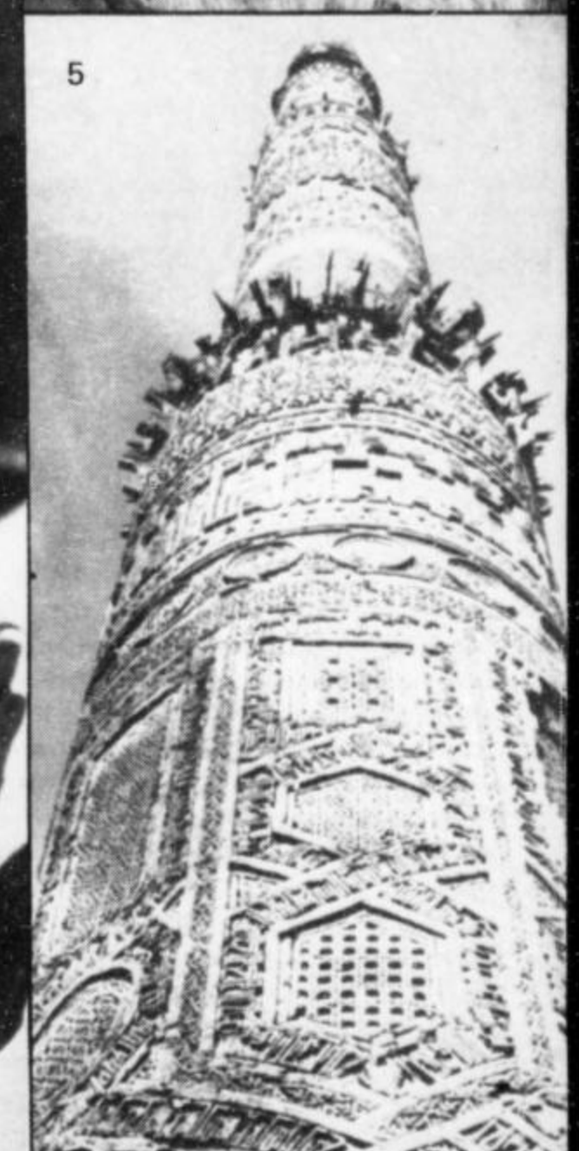

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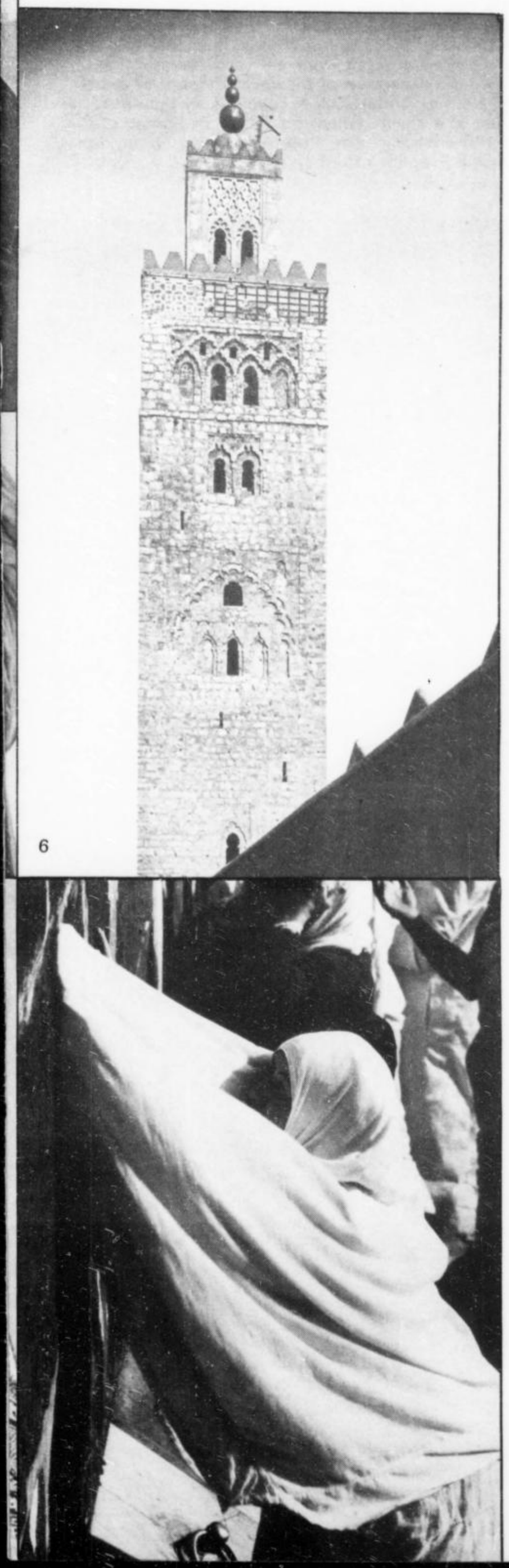


The world of Islam

The emergence of Islam and the exceptionally swift pace at which it came to spread out into the world marked a turning-point in the history of mankind. After being revealed to the Prophet Muhammad in Arabia, Islam ranged, in the space of a few generations, from Africa's Atlantic seaboard to the coasts of South-East Asia. At the present time, Islam embraces more than 800 million men and women who have the deep-rooted feeling of belonging to one and the same community. Even today, Islam is continuing to spread. The deep-seated cause of its growth lies in a universalist outlook that transcends all distinctions of race, and enables peoples to join together in Islam while still preserving their own culture. On the following pages we give, in words and pictures, a glimpse of this diversity in unity which is the hallmark of the *Umma*, or Community of Islam.

1. The Great Mosque (XIV/20th century) at Kuala Lumpur, Malaysia.

Photo Jacques Thomas © Explorer, Paris

2. Minaret of a mosque in Tripoli, Libyan Arab Jamahiriya.

Photo David Lomax © Robert Harding Associates, London

3. Minaret of the Great Mosque (III/9th century) at Samarra, Iraq.

Photo © André Stevens, Winksele, Belgium

4. The Mosque of Sultan Hassan (VIII/14th century), Cairo, Egypt.

Photo Georg Gerster © Rapho, Paris

5. The Minaret of Jam (VI/12th century), Afghanistan.

Photo © Robert Harding Associates, London

6. The Koutoubia Mosque (VI/12th century), Marrakesh, Morocco.

Photo Jean Mazenod © Editions d'Art Lucien Mazenod, Paris

Photos of people, Abdelaziz Frikha © Sud Editions, Tunis

The world of Islam

A universal mis

This huge encampment on the plain of Arafat houses some of the million or more Muslims from all over the world who each year come to Mecca to make the *hajj*, the pilgrimage that every Muslim who has the means to do so must perform at least once in his lifetime. As he approaches Mecca the pilgrim dons the seamless garb of *ihram* consisting of two pieces of white material. The *hajj* takes place in the month of Dhu 'l-Hidjdja and involves the performance of a number of ritual acts. These include the *tawaf*, the sevenfold circumnambulation of the Ka'ba and the *sa'y*, which involves going backwards and forwards seven times between the mounds of al-Safa and al-Marwa, which are within the precincts of the Haram, or Great Mosque of Mecca. Further rituals are accomplished in the neighbourhood of Mecca, including the throwing of seven stones at three stone columns representing Satan, at Mina, and the ascension of the sacred Mount of *Jabal al-Rahma*, on the plain of Arafat. This is followed by the *adha*, the sacrificial slaughter of a sheep, which marks the beginning of the greatest festival of the Islamic year. Before returning home, most pilgrims also visit the Prophet's tomb at Medina.

sion

by Habib Chatty

"Men, have fear of your Lord, who created you from a single soul..."
(The Qur'an, IV:1)

THE basic characteristic of Islam is the universality of its message. It has no place for particularism. The Muslim religion is, by its very essence, open to all and does not seek to impose itself upon anyone. The appeal of the Qur'an is addressed to those who hear it. God said to Muhammad: "We have sent you forth to all mankind, so that you may give them good news and warn them" (XXXIV:28).

Islam is essentially peace-loving and presupposes the fundamental equality of all mankind, based on their essential oneness, their common origin and their common destiny: "Men, have fear of your Lord who created you from a single soul. From that soul He created its mate, and through them He bestrewed the earth with countless men and women" (IV:1).

No distinction of race or nation, no privilege of caste or class, no right of birth can prevail over obedience to God and devotion to the cause of humanity. "All mankind", said the Prophet, "is one family in the care of God; the man best loved by God is he who makes himself most useful to his family". Or again, "The Arab is not above the non-Arab, nor is the white man above the black unless he is more pious". It would be difficult to find a better expression of the solidarity of mankind or of the fundamental equality of all men.

But these are not the only reasons for the universality of Islam. Not only is it the last of the revealed religions, it also claims to be the ultimate synthesis of all previous divine messages. For this reason a Muslim is bound to believe in such of these messages as were previously transmitted to mankind by messengers other than Muhammad. This illustrates the extent to which Islam, by its very essence, is a religion of concord, friendship and tolerance; it is a synthesis which reiterates all that had already been revealed to Abraham, Moses, Jesus and others, commenting, correcting, elucidating and elaborating their message: "The Apostle believes in what has been revealed to him by his Lord, and so do the faithful. They all believe in Allah and His angels, His scriptures, and His apostles: we discriminate against none of His apostles..." (II:285). This is why Islam may be seen as a crucible in which all the divine truths have been merged, a source where any willing spirit may encounter its own truth, inspiration and serenity.

Such, in my view, is the inner, vital principle which has contributed so much to the rapid expansion of Islam to the four corners of the earth, rejecting all prejudice based on race, colour or culture and all geographical compartmentalization.

Man, God's vice-regent on earth, is not obliged to remain in any one spot. With the exception of the three great centres: the Sacred House in Mecca, the Mosque of Medina and the al-Aqsa Mosque in Jerusalem, meeting place of the three revealed religions, Judaism, Christianity and Islam, all places on earth are equal. Man's duty is to inhabit them and enjoy their gifts: "It is He who has subdued the earth to you. Walk about its regions and eat of that which He has given you..." (LXVII:15)

In fact, a Muslim is not supposed to grow too attached to any particular place. The whole earth is his country. All points of the compass are good. It is up to him to explore them, either to bring something to them or to find refuge there. Wherever he goes the Muslim is always at home. He is pre-eminently a citizen of the world.

It is not surprising therefore that the map of Islam should have taken no account of natural and geographical factors, as the faith reached out beyond deserts and mountains, beyond the arid and rainy regions alike.

For nothing can be greater than the "domain of Islam". Geographical and conceptual universality go together. Idea is embodied and developed in reality.

The present geographical area of Islam extends from Asia to Africa and from Europe to the continents of America and Australia. In all climes and in all seasons, without distinction of race or ethnic group, whether Muslims have been in the majority or the minority, Islam has illumined the earth; it has moved all hearts and penetrated into all cultures. Nothing can hem it in, for it is as open as the sky and it breaks through all barriers.

Our non-Muslim friends often find it hard to understand the phenomenon of Islamisation. Admittedly it runs counter to the form of reasoning that classifies and sets out causes and effects in one homogeneous context. It is perhaps for this reason that Islam is often regarded in the West as a religion of war, violence and coercion.

Yet, if one examines the question closely, it is clear that Islam has never and nowhere imposed itself by force. This would be contrary to the spirit and the letter of the Qur'an ►

Photo Abdelaziz Frikha © Sud Editions, Tunis

HABIB CHATTY, *Tunisian diplomatist, has been Secretary-General of the Organization of the Islamic Conference since October 1979. He had previously served for several years as his country's Minister of Foreign Affairs and had been Tunisian ambassador to Lebanon, Syria, Turkey, Iran, the United Kingdom and Morocco.*

The world of Islam

which says in so many words: "There shall be no compulsion in religion" (II:256).

To make Islam known is indeed a work of piety, but only if dialogue and gentleness are used rather than violence and force: "Call men to the path of your Lord with wisdom and kindly exhortation. Reason with them in the most courteous manner." (XVI:125). The Qur'an is even more strict when it refers to the "People of the Book", whether they be Jews or Christians: "Be courteous when you argue with the People of the Book..." (XXIX:46). For how can one compel a human soul to love what it rejects? Any acceptance obtained through coercion would be superficial and temporary.

But the problem has not been entirely solved and, at a time when we are seeking to establish a dialogue between men and between civilizations, we must not try to gloss over difficulties or put forward simplified solutions.

Islam's detractors are always quoting a few verses from the Qur'an which in fact call for a "holy war". In support of their argument they also cite "historical facts" which are often unfamiliar to them or wrongly interpreted.

The true meaning of these verses and these facts cannot be fully understood unless they are seen in their historical context. Like all religions, Islam was not a disembodied event. It came into being in time and space, in the midst of men and ideas. The first Muslims who adopted it were also subject to the vicissitudes of world history and the contingencies of human existence in all its ideological, political, economic and intellectual aspects. Faced with a choice between commitment and aloofness they chose the more difficult solution, even though it meant engaging in battles that were not of their seeking.

Recourse to war, even to holy war, is subject to all kinds of moral and material restrictions and to a series of strict conditions; war is only a "last resort" to be adopted in certain circumstances. A Muslim can react to aggression when he is the victim, but in no circumstance must he be the first to attack: "If any one attacks you, attack him as he attacked you. Have fear of Allah, and know that Allah is with the righteous" (II:194).

Legitimate defence is allowed but not unjustified attack. This is why, while prescribing war to the Muslims, the Qur'an recognizes that it can only be the object of aversion. War is really a "last resource", something resorted to under compulsion: "Fighting is obligatory for you, much as you dislike it. But you may hate a thing although it is good for you, and love it although it is bad for you..." (II:216). A Muslim has the right to fight only those who fight him: "Fight for the sake of Allah those who fight against you, but do not attack them first. Allah does not love the aggressors" (II:190).

Islam in fact is the only religion which has exactly defined the rights of reprisal and the practice of revenge in time of war. This is all the more remarkable because, in war-time, a

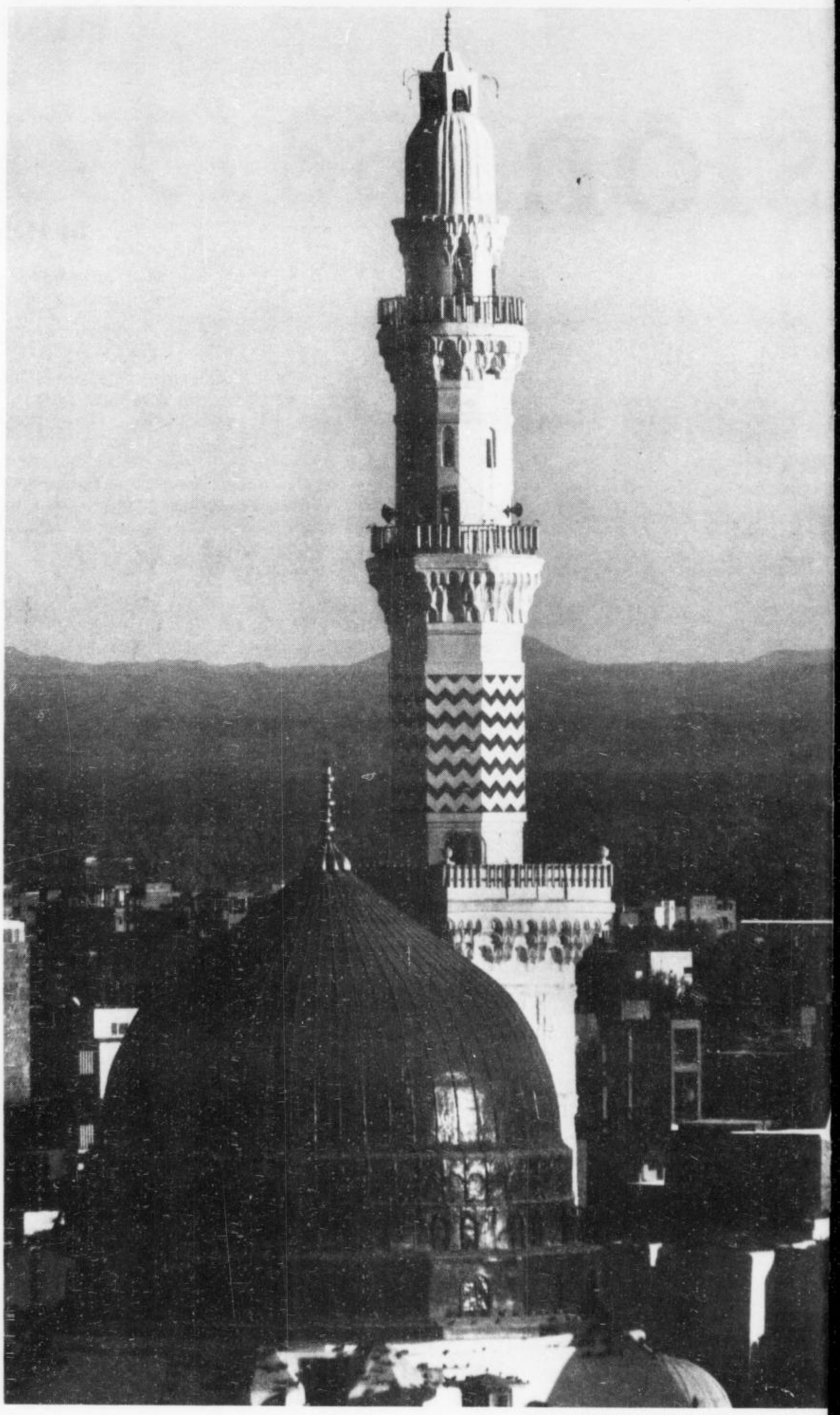


Photo Abdelaziz Frikha © Sud Editions, Tunis

Above, one of the four minarets of the Mosque of the Prophet at Medina. Capital of the first Muslim State, founded by the Prophet after his emigration (*Hijra*) from Mecca in September 622 (year 1 of the *Hijra*). Medina is with Mecca and Jerusalem one of the three most sacred cities of the Islamic world. Muhammad's house at Medina, where believers gathered to pray, was a prototype for later mosques. The Prophet was buried in a chamber which forms part of the mosque of Medina, built in the II/8th century by the Umayyad caliph al-Walid. Here too are the tombs of his two companions who followed him as head of the Islamic community, Abu Bakr and Umar. Rebuilt several times after being damaged by fire, the mosque was considerably enlarged by the Ottoman Sultan Abdul Majid in the middle of the last century and further expansion has been carried out by the kings of Saudi Arabia since 1953. The tombs of the Prophet, his daughter Fatima and his two successors are virtually all that remains of the Umayyad construction. Right, a view of the town of Ghardaia, a fortified town in Algeria which is dominated by its mosque. The town was founded in the IV/10th century by a Berber Ibadiyah Muslim sect.

The Organization of the Islamic Conference

The Organization of the Islamic Conference (OIC) which has 42 member states, was created in September 1969 by the first summit meeting of Islamic heads of state and government, held at Rabat (Morocco).

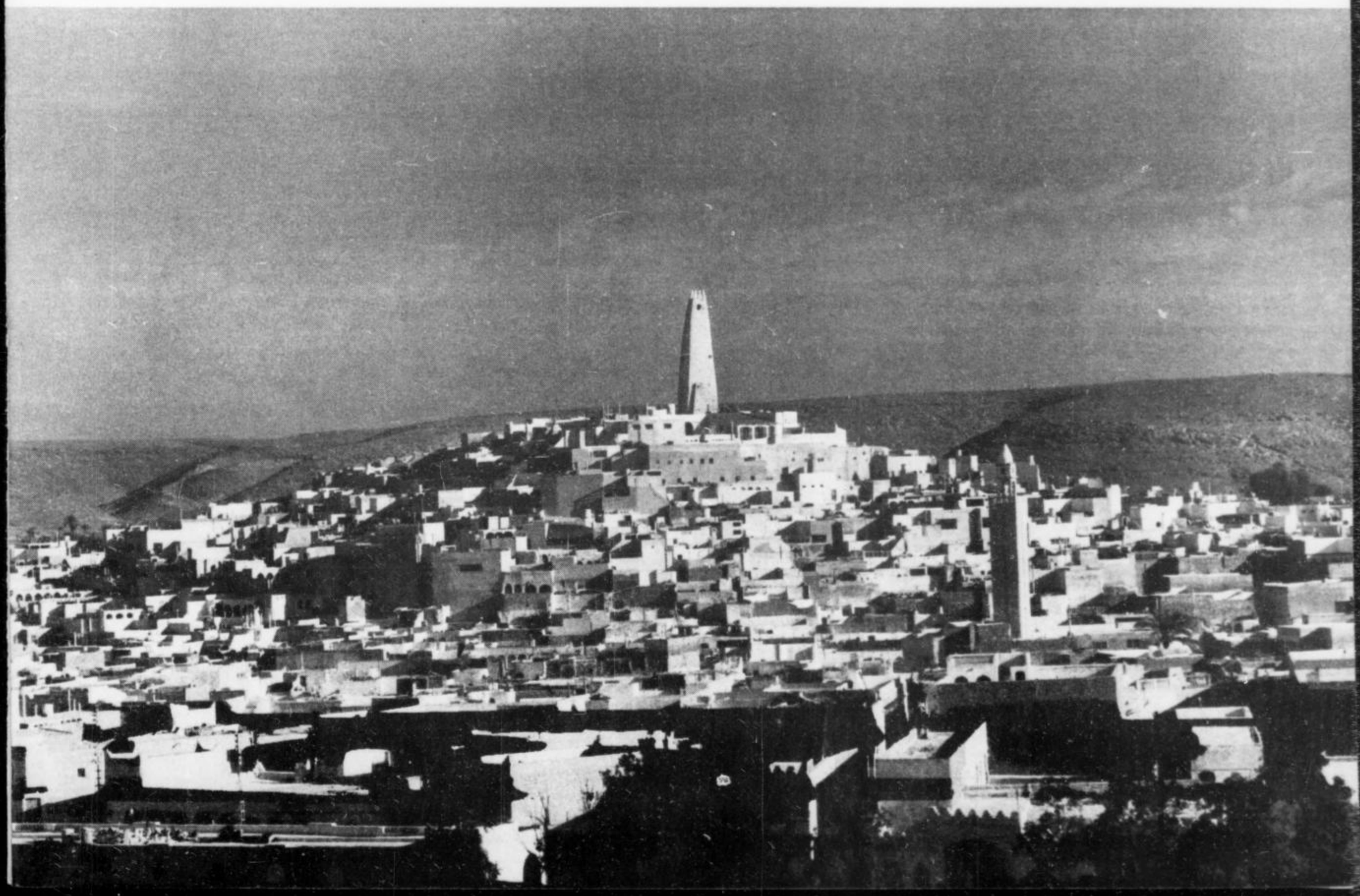
The Organization, whose headquarters are at Jeddah (Saudi Arabia) groups states from the Arab world, Asia, Africa and Europe, in which Muslims constitute the majority of the population.

Its supreme governing body is the Conference of Heads of State, which has so far been held three times: at Rabat in 1969, at Lahore (Pakistan) in 1974; and at Mecca and Taif (Saudi Arabia) in 1981. The Conference of Foreign Ministers has met annually since 1970 in different cities of the Islamic world. Several specialized committees and subsidiary bodies have been created by the OIC, notably: the Islamic Development Bank, the Islamic Solidarity Fund, the International Islamic News Agency, and the Islamic States Broadcasting Organization, all at Jeddah; the Centre for Statistical, Economic and Social Research, at Ankara (Turkey); the Research Centre for Islamic History, Art and Culture, at Istanbul (Turkey); the Centre for Technical and Vocational Training and Research at Dacca (Bangladesh); and the Centre for the Promotion of Commerce, at Tangiers (Morocco).

The OIC, whose activities are financed by contributions and donations from member states, has the following aims: "To promote Islamic solidarity among member states. To consolidate co-operation among member states in the economic, social, cultural, scientific and other vital fields and to arrange consultations among member states in international organizations. To endeavour to eliminate racial segregation and discrimination and to eradicate colonialism in all its forms. To take necessary measures to support international peace and security founded on justice. To co-ordinate all efforts for the safeguard of the Holy Places and support for the struggle of the people of Palestine to regain their rights and liberate their land. To strengthen the struggle of all Muslim people with a view to safeguarding their dignity, independence and national rights. To create a suitable atmosphere for the promotion of co-operation and understanding among member states and other countries."

In addition to the OIC there are two other major international Islamic organizations: the World Muslim League and the World Muslim Congress whose headquarters are in Karachi (Pakistan). They are both non-governmental organizations.

Photo © C. Bastin and J. Evrard, Brussels



The world of Islam

believer is either the persecutor or the persecuted, the victor or the vanquished: "If you punish, let your punishment be proportionate to the wrong that has been done you. But it shall be best for you to endure your wrongs with patience" (XVI:126). So, if by good fortune the enemy inclines to peace, a Muslim must do the same.

What could be more conducive to peace than a heavenly voice saying: "Believers, submit all of you to Allah and do not walk in Satan's footsteps..." (II:208). Those who raise the bogy of an Islam steeped in blood and violence are merely indirectly projecting the image of their own unexorcized past.

Islam owes its expansion in the first instance to its universal vocation. When we examine how it spread through the world, we get the impression that each group won over to the new religion behaved as though it emanated from themselves. In all the battles waged by the Muslims against those who attacked them, it was the Syrians, Persians or Berbers converted to Islam who provided the major part of the manpower, not the Arabs. There is no more effective means of propagating an idea than the exemplary behaviour of those who believe in it. It is instructive to note that several far-off countries where no fighting took place adopted Islam of their own free will without any outside pressure. The warmth of human contact, the integrity of Muslim traders and the sincerity of peaceful missionaries were enough in themselves to overcome paganism and to give birth to civilization.

Wherever it has been, Islam has left behind unforgettable traces. Its spiritual demands make it a civilizing faith. And this must be remembered when we draw up a world map of religions. How else can we explain the number of urban settlements set up by a faith which came into being not in an industrial society, not even in an agricultural one, but in a community which, as Ibn Khaldun pointed out, was hostile to city life.

Before it became a staging post for caravans trading between distant lands, or a *Ribat* (stronghold) defending believers against enemy assaults, the Islamic city was the setting for a way of life where everything was done in common and everything was decided communally. The preaching mosque was the first distinguishing sign of an Islamic town, as distinct from a village. There was also the market with its separate guilds, caravanserais and public baths. It was a microcosm organized in a hierarchical and concentric pattern, designed to embody the religious and social ideal of Islam in which men lived together, prayed together and shared common aspirations. The object was to gather together and not to scatter, to unite and never to divide. Is this not an ideal corresponding to every man's aspirations? Is it not a model for construction and civilization?

The Islamic city, a place both of work and of worship, was also a centre of science and culture. This, again, is one of the requirements of the Islamic faith. And in this

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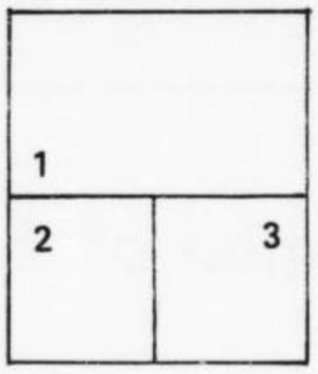
COLOUR PAGES



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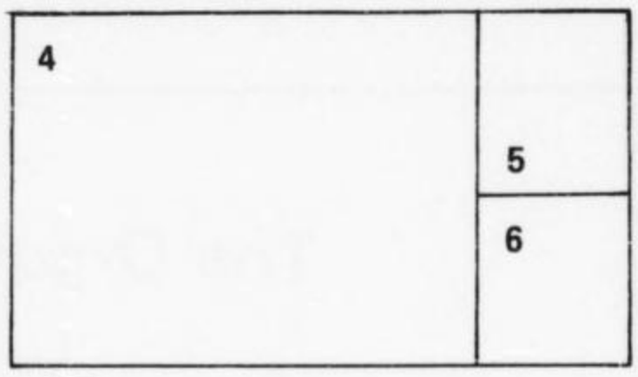


P. 20/21

1. A doctor takes a patient's pulse in this miniature from a manuscript (VIII/14th century) of *Kalila and Dimna*, a Persian version of a famous collection of Indian stories known after their narrator as the "Fables of Bidpai". In the Islamic world medical ethics and doctor-patient relations were defined in the IV/10th century by Razi (known in Europe as Rhazes) who produced a vast encyclopaedia of the medical sciences, *al-Hawi* (the "Comprehensive Book" famed in the Latin world under the title *Continens*) as well as many treatises expounding his experiences as a physician. Along with Ibn Sina (Avicenna, see *Unesco Courier*, October 1980), Razi was for centuries considered as one of the great masters of medical science both in the Islamic world and in the Christian West.

2. Miniature of a sesame plant from a VII/13th century Arabic translation of the *Materia Medica* of the Greek physician and pharmacologist Dioscorides (1st century AD), a work which was known in the Islamic world by the III/9th century. Muslim scientists such as the great encyclopaedist al-Biruni, Ghafiqi (VI/12th century) and especially Ibn al-Baytar (VII/13th century) developed and refined the pharmacology. Ibn al-Baytar wrote a treatise on simples which lists 1,400 drugs of animal, plant and mineral origin. In the 19th century this work was translated into French and German.

3. This IX/15th century miniature is a striking example of Arab hippology, the scientific study of horses, which generated a prolific literature. Authors were preoccupied with listing and labelling horses' physical organs as seen from the outside. For religious reasons the dissection of animals was prohibited, but according to some sources monkeys were brought specially from Nubia on the orders of the Abbasid Caliph al-Mu'tasim (III/9th century) and dissected near Baghdad.

Photos Roland and Sabrina Michaud © Rapho, Paris

4. In accordance with a tradition of Arab cartography the south is shown at top of this world map from a manuscript of the atlas produced by the VI/12th century Arab geographer al-Idrisi. Little is known of al-Idrisi's life but according to some sources he was born at Ceuta (Morocco) in 494 AH/1101 AD and studied the classics at Cordoba before travelling widely in the Muslim West and probably in certain Christian countries. He then became the court geographer of the Norman King Roger II of Sicily, constructed a silver globe and planisphere, and completed for his patron a work of descriptive geography lavishly illustrated with maps and generally known as "The Book of Roger". A synthesis of existing Greek and Arab knowledge, "The Book of Roger" is considered by specialists to be the high point of Islamic cartography.

Photo © Bodleian Library, Oxford

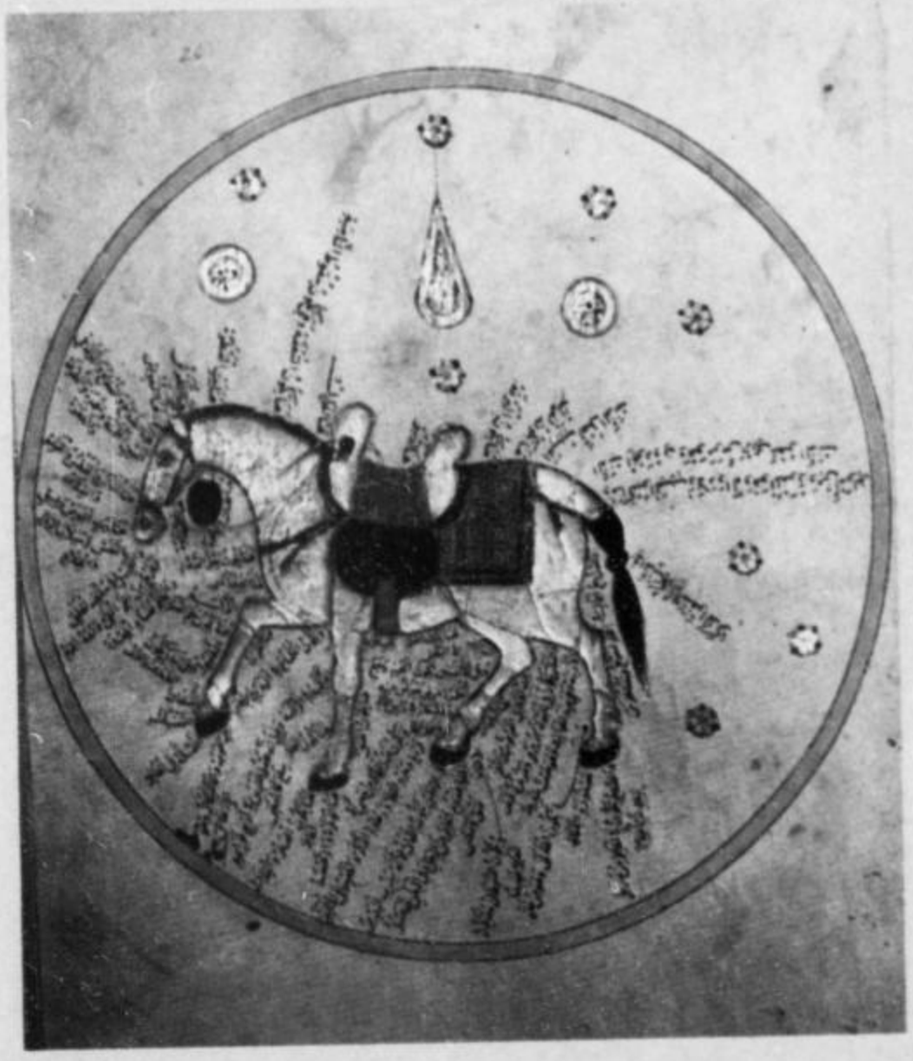
5. Drawing of the constellations from a IX/15th century manuscript of *Suwar al-kawakib al-thabita* (Images of the Stars), a treatise written by the Persian astronomer Abd al-Rahman Sufi in the IV/10th century at the request of the Sultan. Often copied and illuminated, the work had a great influence on European astronomy through a treatise written by the Spanish King Alfonso the Wise, the *Libros del Saber de Astronomia*.

Photo © Bibliothèque Nationale, Paris

6. Al-Biruni, born at the end of the IV/10th century, is one of the greatest thinkers in the history of mankind. Astronomer, historian, botanist, mineralogist, linguist and philosopher, he made notable contributions to every branch of learning of his time (see *Unesco Courier*, June 1974). Among his works is a general introduction to astronomy and astrology, the *Kitab al-tafhim*, (Elements of Astrology) in which he discusses the different types of astrolabe and their uses. Drawing shows part of the system of toothed wheels whereby an astrolabe can be used to determine the position of the heavenly bodies.

Photo Roland and Sabrina Michaud © Rapho, Paris

بدان واثق تواند شد وآنرا سبب شفا شمرد وباز اعمال خیر وساختن توشه آخرت از علت گناه ازان
گونه شفا می دهد که معاودت صورت نبندد ومن بحکم این مقدمات از علم طب تبرا نمودم و



جنوب
جبل القمر وهو منبع النيل
الواق واق
سفاله
الزنج
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الحجاز
اليمامه
السند
الهند
كرمان
فارس
خراسان
الصين
العراق
الشام
مصر
الحبشه
النوبه
كوار
صحاري برنيق
التبت
الشاش
خرخيز
غزيه
بلغار
جرمانيه
المانيه
افرنسيه
ياجوج
ماجوج
مشرق

كانم
بلاد لملم
بلاد مضاره
بلاد غانه
قران
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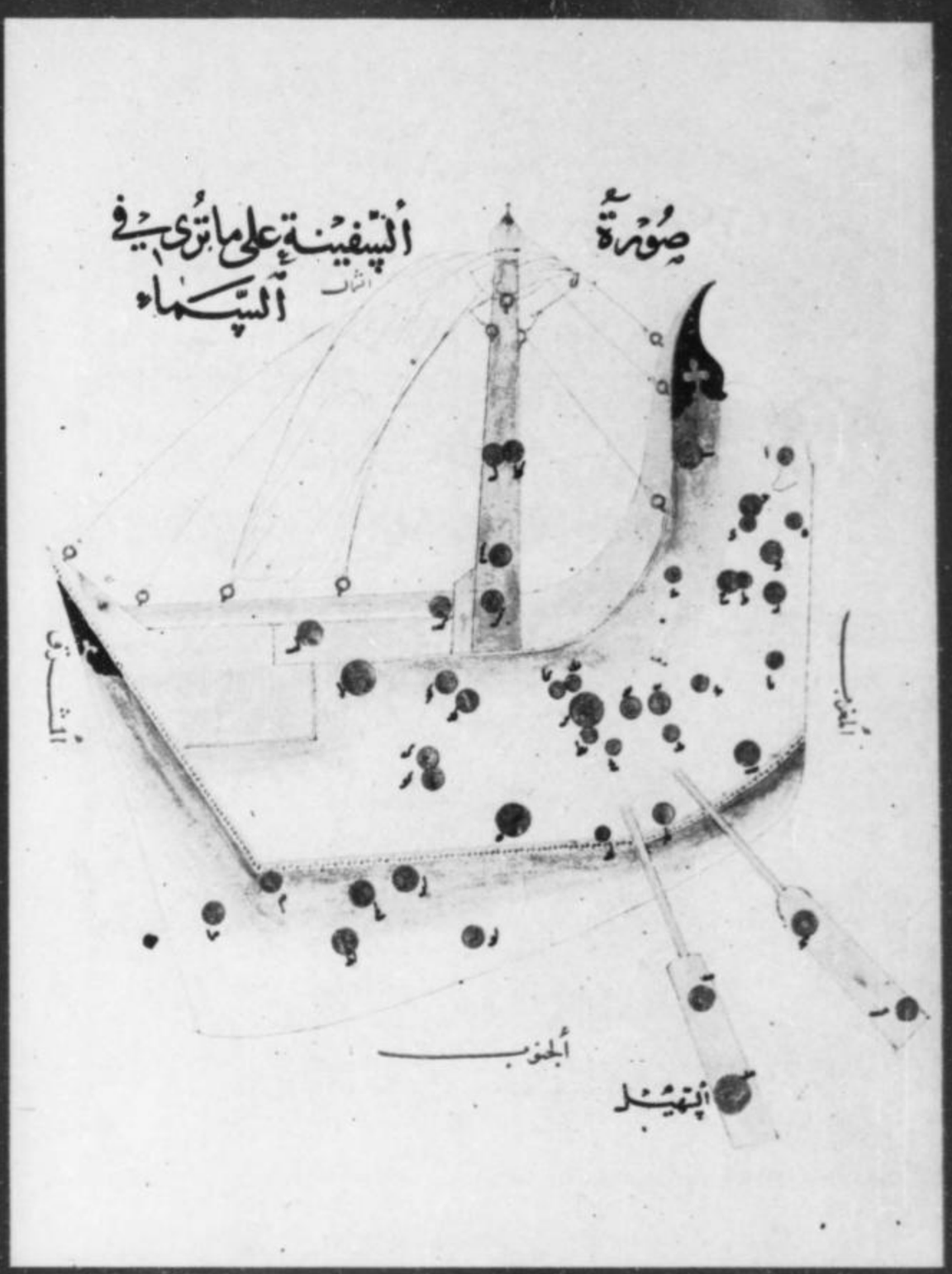
افريقيه
طنجه



صورة السفينة على ما ترى في السماء
الشمال
المغرب
المشرق
الجنوب
السهيل

وكان ارسطوطاليس ابيض اجلح قليلا حسن القامة عظيم العظام
العينين كث اللحية اشهل العينين اقنى صغير الفم عريض الصدر يسرع
في مشيته اذا خلى ويبطي اذا كان مع اصحابه ناظرا في الكتب دايما
لا يهن او يقف عند كل كلمة ويطيل الاطراق عند السؤال قليل الجواب
يتنقل في اوقات النهار في الفيافي ونحو الانهار محب لاستماع الالحان
والاجتماع باهل الرياضات واصحاب الجدل منصف من نفسه اذا خصم معترف
بمواضع الاصابة والخطا معتدل في الملابس والماكل والمشارب والمناكح و
الحركات ❀ بيده آلة النجوم والصناعات ومات وله ثمان وثمنون سنة

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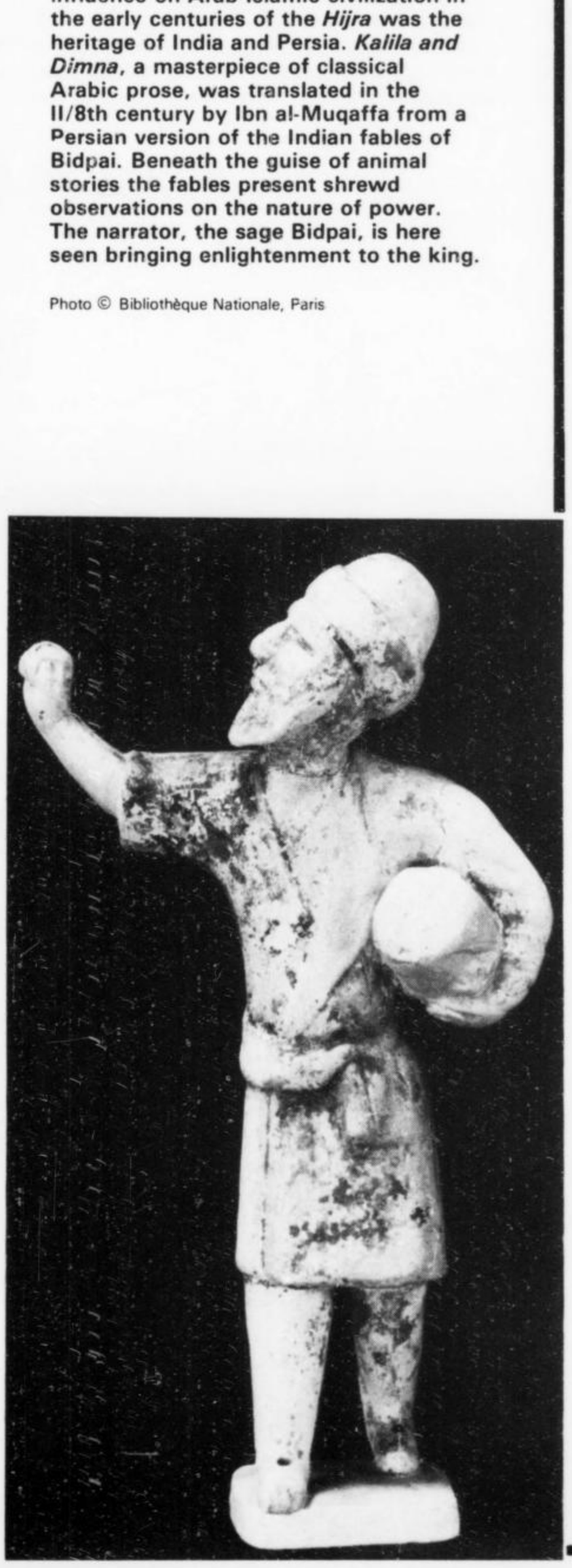
Top: during the first centuries of the Abbasid dynasty (II-VII/8th-13th centuries), Baghdad became a melting pot of all the cultures of the ancient world. Its school of translators, led by Hunayn Ibn Ishaq (died 263 AH/877 AD) made accessible to the Arab-Islamic world masterworks of Greco-Hellenistic science and philosophy, notably those by Aristotle, Galen, Hippocrates and Dioscorides, and encouraged the development of a technical vocabulary in Arabic. Aristotle, considered to be the supreme master, is seen teaching in this miniature from "The Best Sentences and the Most Precious Sayings" (from a VII/13th century manuscript). The accompanying text provides a pen-portrait of the great philosopher.

Photo © Ara Güler, Istanbul

Bottom: another strong formative influence on Arab-Islamic civilization in the early centuries of the *Hijra* was the heritage of India and Persia. *Kalila and Dimna*, a masterpiece of classical Arabic prose, was translated in the II/8th century by Ibn al-Muqaffa from a Persian version of the Indian fables of Bidpai. Beneath the guise of animal stories the fables present shrewd observations on the nature of power. The narrator, the sage Bidpai, is here seen bringing enlightenment to the king.

Photo © Bibliothèque Nationale, Paris



IBN BATTUTA
Around the world in thirty years

Perhaps the greatest traveller who has ever lived, Ibn Battuta was born at Tangiers, Morocco, in 703 AH/1304 AD. At the age of twenty-one he started his travels by undertaking the pilgrimage to Mecca. This was the start of thirty years of wandering during which he would travel almost 120,000 kilometres and visit all the Muslim countries.

In the course of this great journey, comparable only to that of Marco Polo, he visited Mecca four times, became a judge in Delhi and in the Maldive Islands, accompanied a Greek princess to Constantinople, sailed to Sumatra and Java, and journeyed to China as ambassador of the Sultan of India. Then, in 750 AH/1349 AD he returned briefly to his own country ("the best land in the world") before setting off immediately to the kingdom of Granada and after that on a journey through Africa to the Niger basin.

The diary which Ibn Battuta dictated to a scribe during his travels is a source of the first importance for the history of the Muslim world of his time, especially for the history of India, Asia Minor and West Africa.

If there are historical inaccuracies in Ibn Battuta's writings, they are largely attributable to the pronounced taste for the bizarre which was characteristic of the age, and to the loss of his notebooks during a pirate attack in the Indian Ocean.

But errors or exaggerations do not detract from the value of Ibn Battuta's narrative which is written in a direct, straightforward style punctuated by observations which are not without humour. His entertaining story has been translated, wholly or in part, into some 15 languages and ranks among the masterpieces of Arabic literature.

The following brief extracts from The Travels of Ibn Battuta *have been translated from the 4-volume Arabic edition established by C. Defremery and B.R. Sanguinetti. The first and third extracts are from vol. I and vol. II of the translation by Sir Hamilton Gibb published for the Hakluyt Society by the Cambridge University Press in 1958 and 1971.*

The bountiful city of Cairo

I arrived at length at the city of Misr (Cairo), mother of cities and seat of Pharaoh the tyrant, mistress of broad provinces and fruitful lands, boundless in multitude of buildings, peerless in beauty and splendour, the meeting-place of comer and goer, the stopping-place of feeble and strong. Therein is what you will of learned and simple, grave and gay, prudent and foolish, base and noble, of high estate and low estate, unknown and famous; she surges as the waves of the sea with her throngs of folk and can scarce contain them for all the capacity of her situation and sustaining power. (I, 67-68)

Portraits in Pekin

As far as painting is concerned, no nation, Christian or otherwise, can vie with the Chinese; they have an extraordinary talent for this art. Among the astonishing things i have seen among them in this respect I will say that every time I entered one of their cities and have returned thither since, I have always found my portrait and those of my companions painted on the walls and on papers in the markets. Once I entered the city of the Sultan (Pekin); I crossed the painters' market and arrived in the sovereign's palace with my companions; we were all dressed in the style of Iraq. In the evening when I left the castle I passed through the same market; I saw my portrait and that of my companions painted on pieces of paper stuck to the walls. Each of us began to examine the face of his comrade and we found that the likeness was perfect. (IV, 262)

Post-haste in India

In India the horse-post, which they call *ulaq*, consists of horses belonging to the Sultan (with relays) every four miles. The service of couriers on foot has within the space of each mile three relays, which they call *dawa*, the *dawa* being a third of a mile, and a mile itself is called by them *kuruh*. The manner of its organization is as follows. At every third of a mile there is an inhabited village, outside which there are three pavilions. In these sit men girded up ready to move off, each of whom has a rod two cubits long with copper bells at the top. When a courier leaves the town he takes the letter in the fingers of one hand and the rod with the bells in the other, and runs with all his might. The men in the pavilions, on hearing the sound of the bells, get ready to meet him and when he reaches them one of them takes the letter in his hand and passes on, running with all his might and shaking his rod until he reaches the next *dawa*, and so they continue until the letter reaches its destination. (III, 95-96)

This clay statuette of a carpet-seller of Arab or Persian origin is from the Chinese city of Kashgar, a fertile oasis at the foot of the Pamir mountains. It dates from the Tang era (I-IV/7th-10th centuries) when Kashgar was a thriving trading centre at a meeting point of two branches of the silk road. As the figurine suggests, Arabs and Persians travelled to China at the beginning of the Tang dynasty to trade or to make their home. Around the time of the great Arab traveller Ibn Battuta, who arrived in Pekin in 673 AH/1275 AD, four years before Kublai Khan became emperor of China, the Mongol conquerors of Sung China encouraged Muslims, Jews and Christians as well as various peoples of central Asia, to settle in China.

Photo © Royal Ontario Museum, Toronto

The world of Islam

CONTINUED FROM PAGE 18

age of exact sciences and precision technology, the objective historian cannot fail to recall the decisive role played in this field by Islamic cities such as Kairouan, Cairo, Fez, Marrakesh, Tlemcem and Alexandria in Africa, Baghdad, Basra, Kufa, Damascus, Ispahan, Bukhara, Samarkand and Lahore in Asia, and Istanbul and Cordoba in Europe. Within these mediņas, with their minarets towering above all others in the sky of human knowledge, the sciences of the whole world—Chinese and Indian, Greek and Roman, Egyptian and Chaldean, theoretical, practical, experimental and formal—were patiently gathered together, lovingly preserved, translated, commentated upon, studied, recreated and rethought by a succession of inspired scholars. The Islamic city was an intellectual workshop which gave rise to an unprecedented development of knowledge without which the modern world as we know it would never have been possible. This is recognized unanimously by historians of science from Sarton to Crombie in the United States and from Duhème to Koyré and Taton in France.

The opportunities open to the Islamic world today seem even richer than those which produced the glories of its past. The realm of thought which has given so much to mankind is still full of promise, eager to serve and to work for a better international order.

True, the Crusades, the Mongol invasions, the Spanish Inquisition and, more recently, colonialism have left bitter memories which caused the Islamic world to adopt for a time a defensive attitude. But today, despite all obstacles, it is regaining confidence. The task will not be an easy one. The Muslim world must first overcome its internal contradictions and dissensions. It must seek cohesion within each country, for at present this cohesion is threatened by disputes between movements and sects which are not really divided by anything except a legitimate desire to be more useful. It must also strengthen the fraternal and neighbourly links between the countries involved.

There is no denying the fact that the Islamic world is going through a crisis. But these are only growing pains. Disputes between religious sects (Sunnites and Shi'ites) political differences and armed conflicts can

Photo © Omnia, Bern

Right, street scene in Skopje, Yugoslavia, with mosque in background. Skopje and Sarajevo are the main centres of the Yugoslav Islamic community which is estimated at about three million. Below, the domes of Istanbul with in the background, the Golden Horn and the minarets of the famous "Blue Mosque", built in the XI/17th century by Sultan Ahmed Djami.

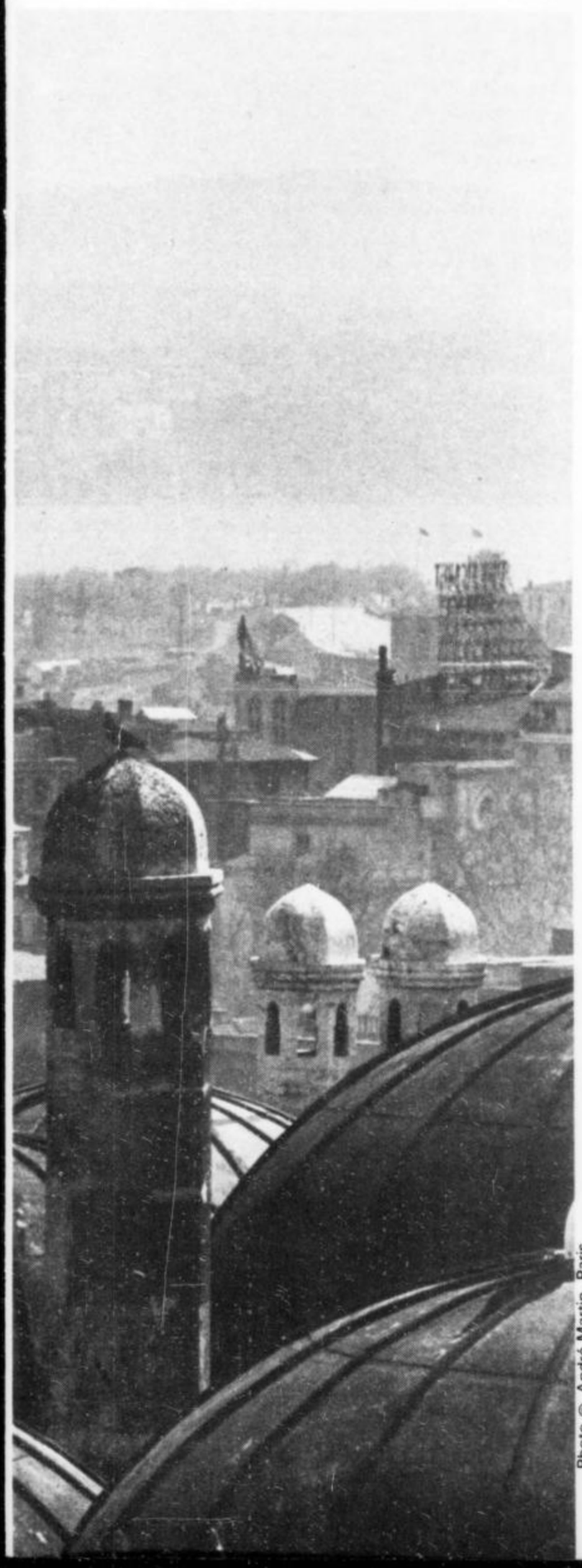


Photo © André Martin, Paris

only be seen, from a historical point of view, as passing difficulties.

Over and above incidental conflicts and temporary inconsistencies, Muslims see themselves as members of an *Umma* or spiritual community which transcends all differences and resolves all disagreements. For this reason, I believe that the divine link uniting them will always prove stronger than the interests which today oppose some members of the Islamic family.

Our history, both modern and ancient, which shows that Muslims disagree with one another only to come eventually to a better accord, strengthens me in this conviction; so does the history of other peoples. The present lack of unity in the Muslim world is not a unique case in the history of mankind. Europe, flourishing today, has lived through two devastating wars. Yet it has succeeded in assuaging its passions. The Muslim world has all the more reason for believing it can do the same since it sees itself as an *Umma*, a community in which mutual aid, protection and confidence are the rules of life and the basis of a common spirituality.

This need for unity is all the more urgent because the Muslim world is confronted with a centuries old problem of underdevelopment. It has done much already to solve this problem, but must do more still if it is to take its rightful place in a modern world which Islam, though temporarily left behind, contributed so much to create.

Such are our hopes and preoccupations, such is the meaning of the task which the Muslim world has undertaken to achieve.

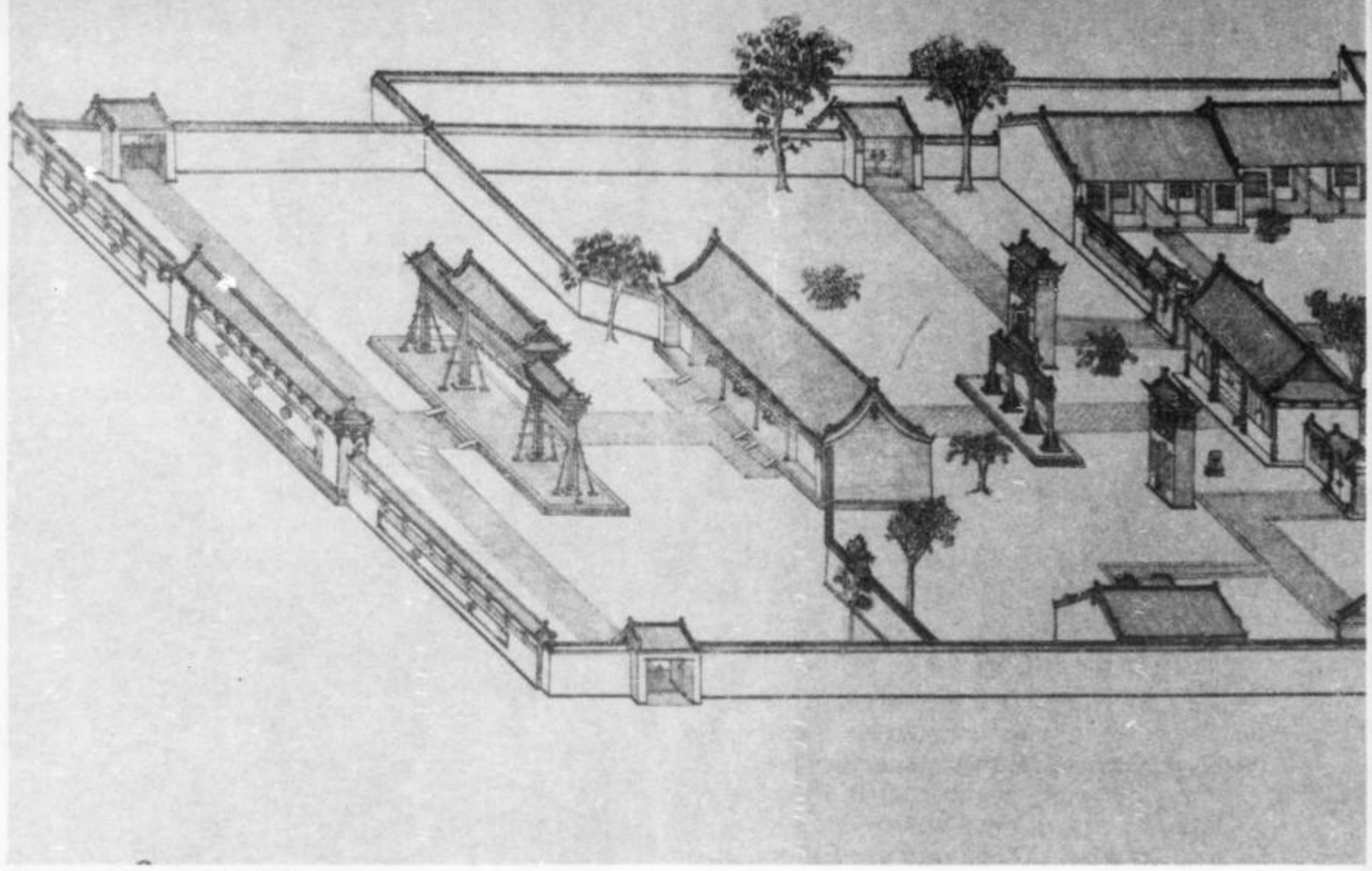
These are also the objectives of the policy which the Organization of the Islamic Conference (O.I.C.) has followed since its inception. Grouping a quarter of the Member States of the United Nations, the O.I.C. is a major force in international politics which keeps an equal distance from the superpowers in its desire to maintain its autonomy in decision-making, its freedom of choice and direction. By creating the O.I.C., the ►

The world of Islam

Muslim countries, conscious of the importance of their human and natural resources and of their economic and political weight, have set themselves a single goal: to unite, so as to face the exigencies of modern life and serve mankind better; to establish a dialogue between men everywhere without distinction of race, culture or ideology, so as to help them know one another better and recognize both their basic likenesses and their legitimate differences.

We believe that this is the way to achieve the victory of peace over war, brotherhood over hatred, tolerance over fanaticism, a better world order and a life of more justice and dignity. We are convinced that by holding out our hand to our neighbours in a spirit of sincerity we shall call forth a response that will fulfil the aspirations, not only of the Muslim countries, but of all mankind. This is the meaning of the message from Mecca, solemnly proclaimed in Taif (Saudi Arabia) by thirty-eight heads of State representing one thousand million Muslims. May this appeal be heard and a true dialogue of civilizations be established between the peoples of the world.

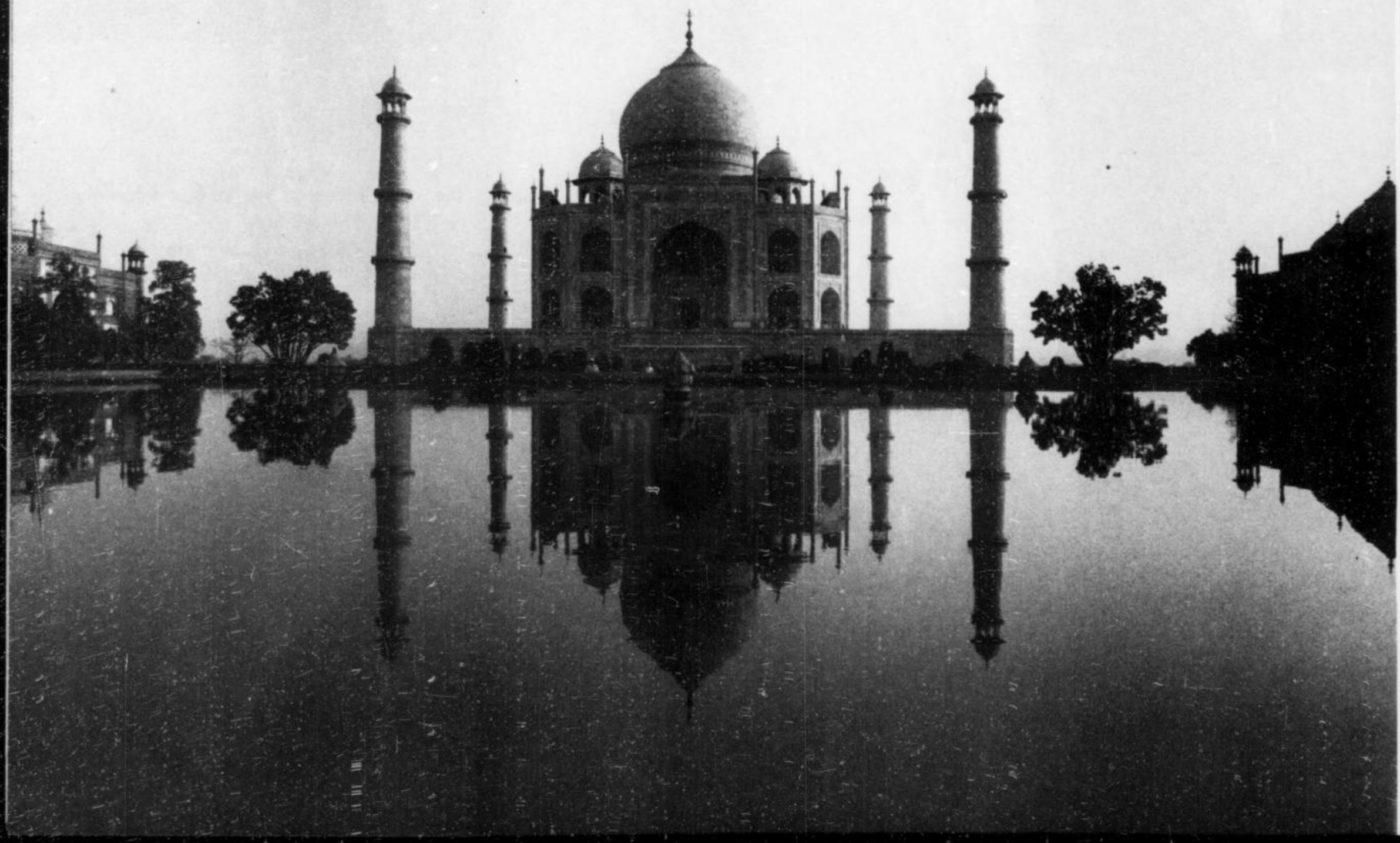
■ **Habib Chatty**



Document Courtesy of André Stevens

Below, the Taj Mahal, Agra, India, the summit of Indo-Islamic architecture, was built in the XI/17th century by the Moghul ruler Shah Jahan as a mausoleum for his wife Mumtaz-i-Mahal. Its ethereal lightness contrasts with the impressive mass (below right) of the mausoleum of Imam Reza, at Mashad, one of the holiest cities in Iran. Imam Reza is revered by the Shi'ite Muslims as the eighth Imam, or leader, in direct line of descent from the Prophet. The mausoleum was built during the III/9th century and successive Muslim rulers have added to it over the centuries.

Photo Georg Gerster © Rapho, Paris



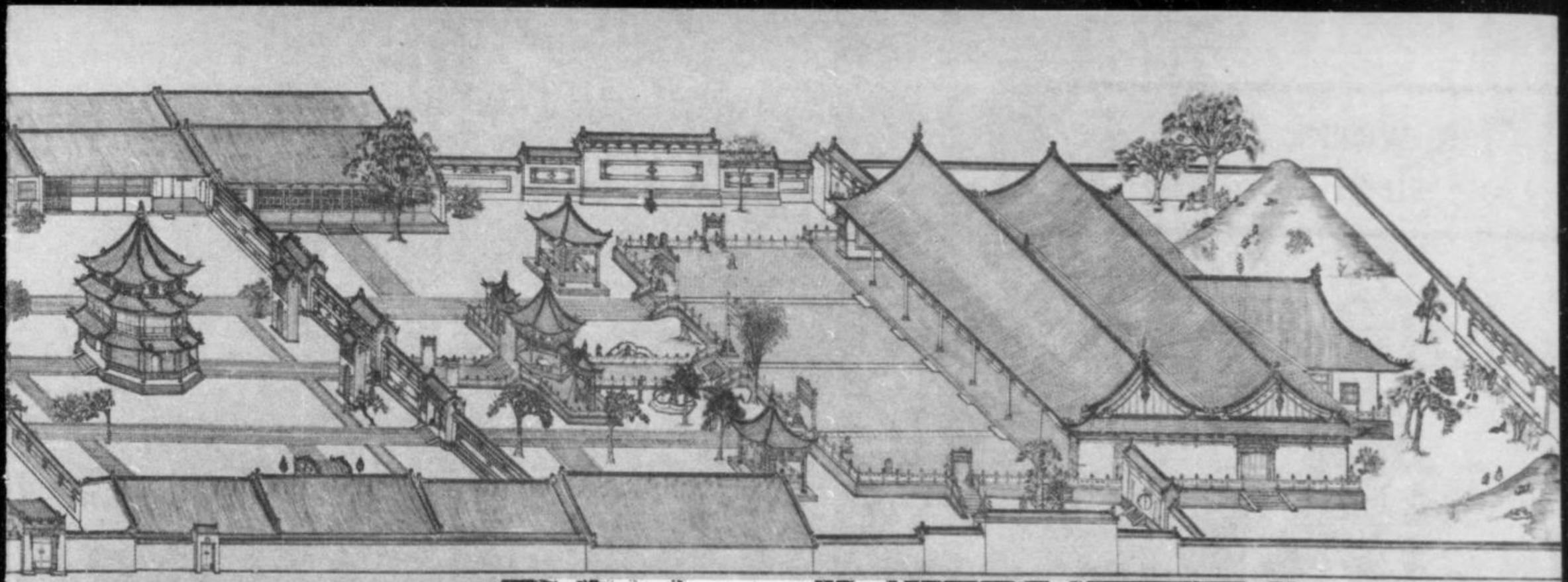


Photo © New China Pictures Co., Pekin

Above, Chinese scroll showing the layout of a Muslim compound built during the II/8th century under the Tang dynasty. The compound was located in the centre of the city of Chian in the province of Kiangsi, south central China. The mosque (photo right), which is clearly recognizable in the scroll, is now being restored.

Photo © Roger Wood, London

Muslims of the Soviet Union

by Ziyauddin Khan Ibn Ishan Babakhan

Photo A. Varfolomeev © APN, Moscow

Muslim scholars in the library of the Miri-Arab *madrasah* (see caption page 34) at Bukhara, in the Uzbek Soviet Socialist Republic.

"You are the noblest nation that has ever been raised up for mankind. You enjoin justice and forbid evil. You believe in Allah."
(The Qur'an, III: 110)

IN the Soviet Union Islam is professed by people representing dozens of nations and ethnic groups. The proportion of Muslims is highest in central Asia, the Caucasus and the Middle Volga regions. The majority of these Muslims profess the Islam of the Hanafite school of the Sunni trend, but there are also Shafi'ites in the northern Caucasus, Shi'ites in Transcaucasia and Isma'ilis in the Pamirs.

Striving to build the most just and prosperous society free from social conflict and class struggle, the Muslims of the Soviet Union scrupulously carry out all the prescriptions and rites of their Holy Religion.

The month of *Ramadan* is a great and joyful event for every Muslim. In the Islamic tradition it is the holiest month, that of the obligatory fast from dawn to sunset. Muslims in the Soviet Union prepare for it in good time. Already during the month of *Sha'ban* which precedes it special sermons are preached in the mosques by the *Imam-khatibs* in which they explain the significance of the fast.

The advent of the month of *Ramadan* is marked by another important custom. From the first days of the month groups of children of the faithful visit the houses of other believers to wish them health and happiness, singing traditional songs concerning the holy month and asking Allah to send the master of the house a lusty son. In return the faithful lavish sweets and presents on the children.

Muslims fast with great zeal and in exact conformity with the prescriptions of the Holy Qur'an; they say their prayers five times a day and in the evening they go to the mosque to take part in the *Salat al-Tarawih* (optional prayers said only during *Ramadan*). Many of the older Muslims begin to fast two months before *Ramadan* which for the Muslims of the Soviet Union is traditionally a period when friendships and family ties are strengthened. Grown-up children who have their own homes or families visit their parents and receive their blessing. Friends and acquaintances visit one another and a particular effort is made to ensure that no Muslim is left without help.

This is also the time of the ancient national rite of *Iftar*; a Muslim family will invite several dozen fellow-believers to break the fast after sundown with them and this is often accompanied by prayers and readings from tne Holy Qur'an by a member of the clergy. As a result of rising standards of living, almost every believer manages to invite a group of the faithful to his house at

least once during the month of *Ramadan* for this nightly breaking of the fast.

The *Lailat al-Kadar*, one of the most revered nights in the month of *Ramadan*, when Allah started to send down the Qur'an to the Prophet Muhammad (Peace be on Him), is celebrated by all the Muslims in the Soviet Union. In some places it is marked by solemn services and special sermons in the mosques, while in others it is more of a family occasion with readings from the Holy Qur'an and prayers to Allah.

On the first day of the month of *Shawwal*, the month after *Ramadan*, begins the solemn feast of *Id al-Fitr* which marks the ending of the fast. On the eve of this feast every Muslim contributes a *Sadaka al-Fitr*, a voluntary offering originally intended for the poor but, now that living standards have considerably improved, are made to the mosque to be used for benevolent purposes such as the restoration of cultural monuments and as contributions to the Soviet Peace Fund.

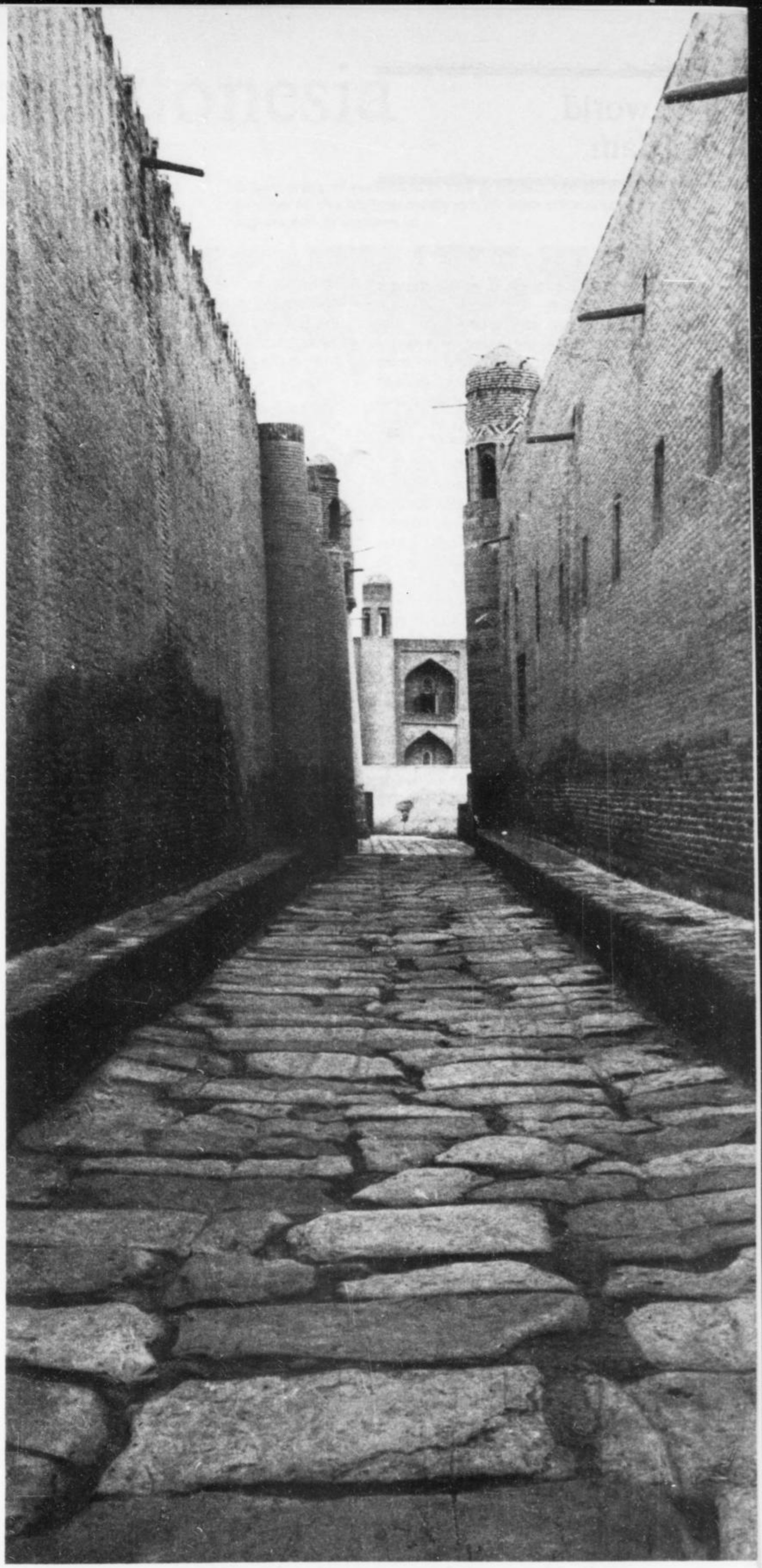
On the feast day solemn services are conducted and famous theologians preach sermons concerning the principles of the Islamic Faith, the need to do good and the desire of Muslims for peace and friendship among peoples. The celebrations also have a worldly aspect; in the republics of central Asia the mosques are surrounded by improvised bazaars which offer various oriental sweets, soft drinks and toys for children, while swings and other entertainments are also available. In the country areas horse-riding is a popular attraction.

Another memorable feature of the fast of Ramadan is the *Khatm Qur'an*, the recital of the whole of the Holy Qur'an by heart. The ability to recite the Holy Qur'an by heart according to all the rules is highly appreciated throughout the Muslim world and Muslims in our country have long been noted as experts in this art. Those who can perform this feat are given the title of Hafiz, the keepers of the Holy Qur'an. To this day hundreds of people keep this noble tradition alive, displaying their skill not only during the fast but also at the regular Friday services or on other festive occasions. At an international competition on the occasion of the 1,400th anniversary of the sending down of the Holy

CONTINUED PAGE 78

MUFTI ZIYAUDDIN KHAN IBN ISHAN BABAKHAN, *is Chairman of the Muslim Religious Board for Central Asia and Kazakhstan, one of four such Boards of Muslims in the USSR. A well-known figure in the world of Islam, he has attended many international Muslim conferences and is a member of the Supreme Islamic Council for Mosques at Mecca. His book* Islam and the Muslims in the Land of Soviets *was published in English by Progress Publishers in 1980, on the eve of the 15th century of the Hegira* (Hijra).

Photo G. Verkovsky © APN, Moscow



Once the capital of a powerful Khanate, the ancient city of Khiva, in the Uzbek SSR, is now preserved as a "city-museum". The old walled inner city contains palaces, mosques, minarets and *madrasahs* (colleges) which, like the Kutlug Mourad Inat *madrasah*, seen here at the end of a narrow stone-paved street, bear the imprint of the eastern Muslim architectural style.

The world of Islam

Renewal and

by Siti Baroroh Baried

SURPRISING though it may seem to non-specialists, Indonesia, on the other side of the globe from the birthplace of Islam, is the home of a larger Muslim population—over 120 million—than any other nation. And yet in this archipelago of over 3,000 islands strung across the Equator, Islam has been helping to shape the course of history for hundreds of years.

In the present century, especially, after Indonesian thinkers and scholars came for the first time into contact with the vital centres of Islamic thought, a powerful Islamic reform and modernization movement came to the fore. It exercised, and continues to exercise, a wide influence in such fields as education, culture and social welfare. One of the organizations belonging to this movement, the Muhammadiyyah, has played a pioneering role in the Indonesian women's movement.

The origins of Indonesia's vast Muslim community can be traced back directly to the proselytizing efforts of Arab and Indian missionaries who initially had to carry out their work without any patronage or assistance from the rulers of the country, relying solely on the force of persuasion.

It is impossible to fix a precise date for the introduction of Islam into the Malay Archipelago, of which present-day Indonesia is a part, but it may have been brought there by Arab traders in the early centuries of the *Hijra*. Trade with China, through Ceylon, began to expand rapidly at the beginning of the I/7th century, and by the middle of the II/8th there were large numbers of Arab traders in Canton. Later, from the IV/10th until the IX/15th century and the arrival of the Portuguese, Arabs were the undisputed masters of trade with the east.

We may therefore conjecture with reasonable certainty that Arabs must at a very early period have established trading settlements on some of the islands of the Malay Archipelago, just as they did elsewhere. Although no mention is made of these islands by Arab geographers before the IV/10th century, the Chinese annals, under the date 54 AH/674 AD, give an account of an Arab chief who, it may be conjectured from later evidence, could have been the head of an Arab settlement on the west coast of Sumatra.

Missionaries must also, however, have come from the south of India, judging from certain characteristics of the Islamic theology which was adopted in the islands. This is important because they brought with them a form of Islam which had inevitably been influenced by Hinduism and, since Islam had already crossed Persia before it reached India, had also received Persian cultural influence. The Indian missionaries belonged to the Shafi'yyah sect, which still holds sway in parts of southern India, while the Shi'ism of which traces are still found in Java and Sumatra must also have come from India or from Persia.

Islam probably gained its first real foothold in Indonesia sometime late in the VII/13th century when the Islamic Kingdom of Samudra Pasai was founded in northern Sumatra. Its Sultan's tomb, dated 696 AH/1297 AD, has survived and bears an inscription written entirely in Arabic. Echoes of the persistent relationship between the archipelago and India and Persia were evoked in the following century by the famous Arab traveller Ibn Battuta (see page 23) who described how the Sultan of Samudra had entered into friendly relations with the court of Delhi and how, among the learned doctors of the law favoured by this devout prince there were two of Persian origin.

The spread of Islam throughout the archipelago was a long process which lasted for centuries and was marked by the rise and fall of a succession of Islamic kingdoms in Java, Celebes, Borneo, Molucca and Sumba. As it gained ground the new faith came into contact with local cultures, especially the mixture of animism and Hinduism that had hitherto prevailed, and acquired as a result certain features which went against strict Islamic principles. Sufis and groups of mystics were the chief architects of this expansion, and an inclination towards mysticism came to be characteristic of Islam in Indonesia. It has been said that these mystic teachings fostered a blind faith rather than a spirit of enquiry into the laws of Islam, carried out in harmony with ideals of development and progress, and that Islam's greatness during these shadowy, kaleidoscopic centuries was only apparent in a handful of outstanding figures. But until the XIII/19th century the Muslims of the archipelago did not affirm their personality and identity.

It was the invention of the steam ship and the development of sea travel which gave a remarkable new impetus to Islam in Indonesia. Now for the first time well-to-do Indonesians were able to make the pilgrimage to Mecca. This marked the real beginning of direct communication between Indonesian Muslims and the birthplace of Islam, and brought them into contact with Muslim leaders from other countries such as Egypt, Syria, India and Algeria.

Many Indonesian pilgrims stayed on in Arabia to study the teachings of Islam from original sources, and closely followed the rise of the reformation movement launched by the Wahabi group, Jamaluddin al-Afghani and the Egyptian Muhammad Abduh. Some of these scholars wrote books on religious subjects in various Indonesian languages. When they returned home, where they became known as the Islamic Reformists, they set out to lead Indonesian Muslims back to a form of Islam based exclusively on the Qur'an and the *Sunna*, to simplify the religious service, and to get rid of everything which was extraneous to the Islamic faith.

A theologian and trader named Kyai Haji Ahmad Dahlan was one of the leading figures in this movement. Dahlan realized that Muslims in Indonesia were facing a crisis of faith, and in Yogyakarta in 1330 AH/1912 AD he founded an organization called the Muhammadiyyah, which was dedicated to the purification of Indonesian Islam and the elimination from it of animistic influences. In its early years the Muhammadiyyah functioned through the *pesantren*, the traditional institution of Islamic learning in Indonesia, but in the course of time it became a highly organized movement active in education, social welfare, culture, health, economic life, the law, publishing, the youth movement and the women's movement.

A striking example of Dahlan's progressive approach was his decision to create a women's section of the Muhammadiyyah. Since many parts of the Qur'an and the *Sunna* are addressed to women and concern their rights and duties, he reasoned, then women must be instructed in the teachings of Islam if they are to enjoy these rights and carry out these duties. He was also fully aware of the potential of women, as well as men, in building the Muslim community. In this preoccupation with education, Dahlan shared the ideals of Kartini, the Javanese woman who is considered to be the first Indonesian champion of equal rights and education for women. The difference was that Kartini observed the lives of women in aristocratic society, whereas Dahlan, travelling to remote parts of the country on business, saw at first hand the wretched conditions of women living in poverty.

The women's section of the Muhammadiyyah, the Aisyiyah, came into being in 1335 AH/1917 AD. It began its existence in the village of Kauman Yogyakarta where it built in 1341 AH/1923 AD Indonesia's first mosque for women, then considered to be an important step forward to reform. Today, half a century later, the organization is still as active as ever in carrying out its mission through the establishment of schools, orphanages and hostels for girl students, and through organizing courses on themes ranging from mental health to handicrafts.

In 1346 AH/1928 AD Aisyiyah was one of seven women's organizations which took the initiative of holding the Indonesian Women's Conference. This led to the creation of the federation, now known as the Indonesian Women's Congress, which groups all Indonesian women's organizations and of which Aisyiyah is still a member.

It continues to work for the progress of Indonesian women, and its activities, thanks to Dahlan's farsightedness as a reformist, illustrate one of the many contributions which the Islamic modernization movement has made to life in Indonesia. ■

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reform in Indonesia

A gathering of members of the Aisyiyah, the women's section of the Muhammadiyyah Muslim reformist movement in Indonesia.

Photo Marc Riboud © Magnum, Paris

The world of Islam

The impact on black Africa

by Sulayman S. Nyang

Built in 1951, the central mosque at Kano is the largest in Nigeria.

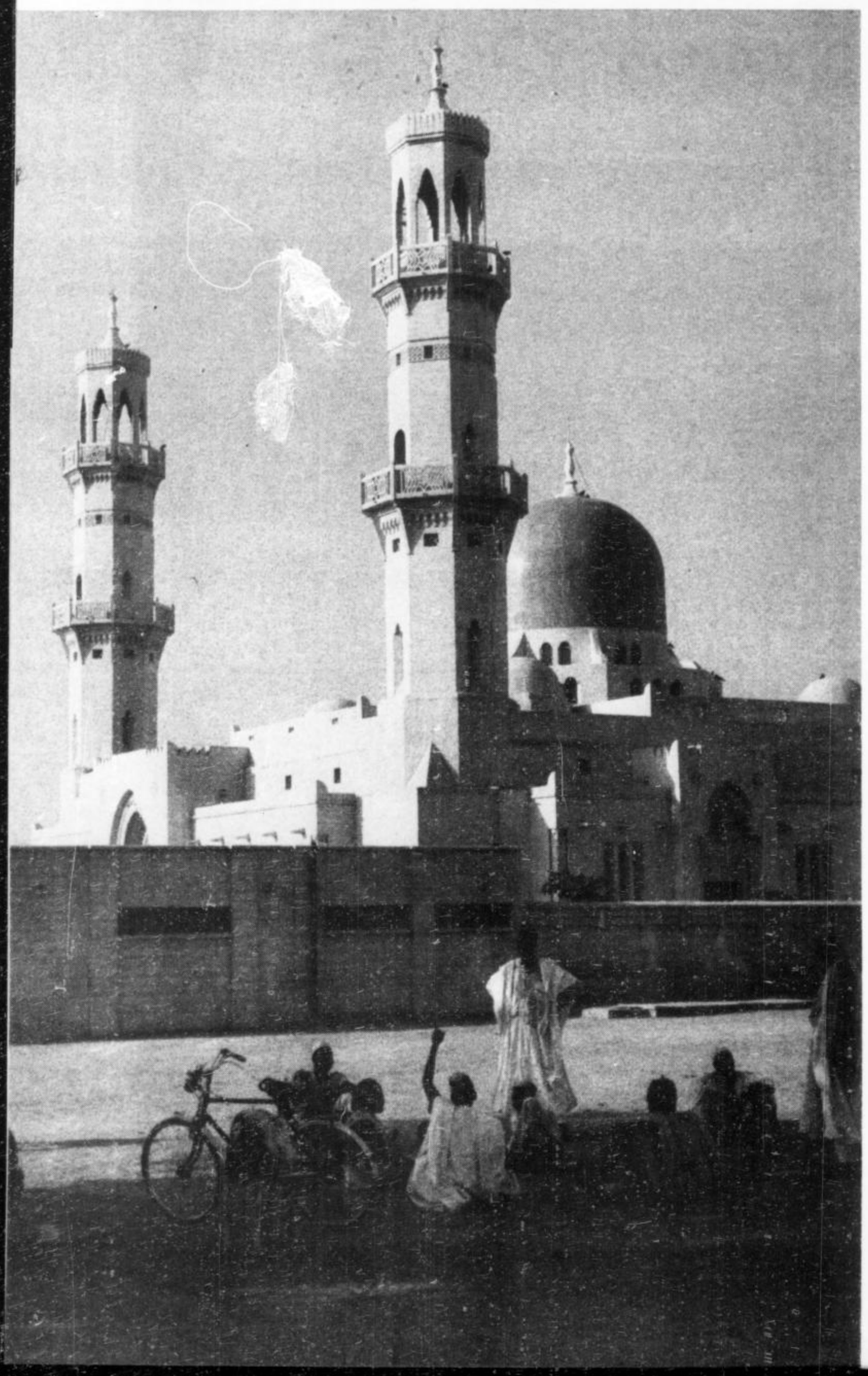

Photo Marc Riboud © Magnum, Paris

THE expansion of the religion of Islam in Africa had great significance for the peoples of the continent. Since Islam came to Africa as a belief system that prided itself on its command of the written word and on the material culture associated with the Word of Allah Himself, it is certainly not surprising that its propagators found it necessary to teach their doctrines and rituals while trading with the inhabitants of African Kingdoms on or below the Sahel.

This intercourse between the Arabs and the Berbers, on the one hand, and Black Africans to the south on the other, opened the door to greater cultural penetration. When we look at the balance sheet of Arabo-Islamic/African relations, we find that the major contribution of Islam in the continent is in the field of intellectual, social, and cultural development.

Islam introduced a new way of looking at life, man and community. Whereas previously the African man lived primarily in a self-enclosed world which restricted his cultural and mental encounters to the environment of his primary ethnic group, the impact of Islam on his consciousness gave rise to a sense of cosmopolitanism. The conversion of the tribal African exposed him for the first time to the brotherhood of Islam, whose borders were beyond what his eyes could see and whose message was aimed at and directed to, all men and women living on this planet.

On the social plane, the conversion of the tribal African to the religion of Muhammad opened, to a certain degree, the door of inter-ethnic co-operation. The fact that the Muslim propagators were in most cases merchants made the converts more receptive to the new ideas and new wares brought into their areas by their fellow co-religionists.

Islam provided a common moral basis for commerce and trade and the *Shari'a* guided all the Muslim merchants in their dealings with one another and with their non-Muslim customers. In addition, in areas of endemic conflict there was a need for readily identifiable neutrals to serve as go-betweens, and the parties to conflicts granted special treatment to those who, by virtue of their trade or profession, were considered non-combatants.

The close relationship between trade and Islam made it possible for the new convert to develop gradually some degree of trust and confidence in men who did not necessarily speak his language but embraced the teachings of his newly adopted religion. This new attitude towards non-members of one's ethnic group was certainly revolutionary, and its potential for greater inter-ethnic co-operation could not be dismissed lightly.

Though Islam was not the factor responsible for the immediate founding of the three great West Sudanese empires, the fact remains that these empires and their rulers profited from the Islamic symbols of their day and their cultural and economic systems were, in varying degrees, exposed to the forces and pressures of the faraway Islamic centres of civilization to the north and northeast.

In fact, in talking about the Islamic contribution to the social universe of the African, one could argue that the arrival of Islam in the continent widened the horizons of the traditional African to some extent. Whereas in the past this man entrusted his

Photo E. Barrios, Unesco

The oasis cities of Tichitt (above), Ouadane, Chinguetti and Oualata, in the Mauritanian Sahara, are the last reminders of the former greatness of a region which lay at the cross-roads of major caravan routes linking the Maghreb and the Sahel. Their fame as centres of intellectual as well as commercial exchange attracted scholars from throughout Islam. At Chinguetti, the starting point for caravans setting out for Mecca, a great library was established, and here too an original architectural form took shape which blended the ideals of Islam with the African cultural tradition. Today the trade routes pass elsewhere and these once great cities are threatened by drought, decay and desert advance. In February 1981 the Director-General of Unesco launched a solemn appeal for international action to safeguard these historic sites for posterity.

destiny to the spirits who resided in a well, a tree or a stream and saw man's life as a link in a chain of beings going back to a mystical founder of his clan or tribe, and whereas he wished to placate the gods and the ancestors, under the Islamic religion he found that his life was for an appointed term and that his deeds on earth had a meaning specific to himself.

He also learned from his Islamic mentors that whatever he did in his lifetime would be accounted for in the hereafter, and the only way he could save his soul and himself at the Day of Judgement was to accept the responsibility of living. This is to say that the conversion of the traditional African meant his gradual realization of the spiritual loneliness of man in the world and his responsibility for living up to the expectations of his religion.

Such an understanding of self and life gave rise to the attempt on the part of many African converts to put into practice the rituals and teachings of Islam. It was indeed in their attempt to live up to the Islamic ideal that many traditional Africans learned to pray with fellow Muslims, or to stand alone before Allah. In their desire to win the favours of their Maker, they learned to fulfil the expectations of the Qur'anic teachings on cleanliness and modesty in clothing.

At the institutional level, one can argue that the religion of Islam introduced several changes in African life. The arrival of a Muslim scholar in an African community most often led to the establishment of the *Madrasah* (Qur'anic school). This new institution gradually replaced, or co-existed with, the traditional centres of education, and the students who were brought before the Qur'anic teacher were slowly inducted into the Islamic culture from the north and northeast.

Besides the Qur'anic school, there were other institutional forms of cultural borrowing. With the gradual penetration of the African consciousness, Islam began to invade the African conceptual world and soon the process of linguistic absorption started to take effect. Consciously or unconsciously, the newly converted African Muslim began to drop traditional words in his language in favour of borrowed Islamic terminology.

A classic example of an African language that has been very much penetrated by the Arabo-Islamic influence is Wolof. The arrival of Islam not only affected the Wolof's conception of time, it also substituted many Arabic terms in his vocabulary. As an illustration, let us take the names given to the seven days of the week. As a result of the Arabo-Islamic influence, the Wolof language, as spoken in the Senegambian region, carries four Arabic words for Tuesday (Arabic *Thalatah),* Wednesday *(Al-Arba),* Thursday *(Al-Khamis)* and Friday *(Al-Jummah).* This is a phenomenon that is widely known in the African communities that have established long contact with the Islamic religion.

Another example of institutional borrowing was the *Tariqa* (Sufi brotherhood). The arrival of the Sufi brotherhoods ushered in a train of developments which affected the history of many African societies south of the Sahara. It is well-known in the growing literature on the Islamic *jihads* in Africa south of the Sahara that the followers of the Sufi brotherhoods played an important role.

A further contribution of Islam is the successful adoption of the Arabic script for the reduction of African languages into writing, This Arabo-Islamic cultural contribution is by no means insignificant. Indeed such a development in Africa's cultural history led to the emergence of a limited form of literacy among many of the Muslim peoples of the West Sudan.

The first products of this newly imported technology of intellectual conservation were the epistles and explanatory comments written down by the *ulema* (men versed in Islamic religion and law) in the West Sudan. It is quite conceivable that many of the West Sudanic *ulema* found it desirable from time to time to reduce to writing their thoughts on certain matters affecting the education of their students.

Another possible reason for the emergence of the written forms of the vernacular was the desire of the more aggressive propagators of the religion to make their message more accessible to the rank and file of their Islamic movement. Some scholars have recently suggested that the earlier literary products of the African vernacular languages that adopted Arabic or even a European language, cannot be classified as literature. They were merely the first manifestation of a foreign script at the service of an African language.

They also believe, and quite correctly, that "... such texts in the West African languages were usually merely parallel to the more important and prestigious originals in the particular languages of the given cultures and powers." But regardless of the limitations of the newly established technology of intellectual conservation, there is strong evidence that such a development had a great impact on the traditional African's social universe. ■

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Teachers, disciples and the

by Mohammed Allal Sinaceur

THE Qur'an is one of the most beautiful hymns to knowledge. It invites study, harmonizes mystery and reason, and exalts those who meditate on the creation and are just towards their fellow men. All these themes are brought together at the beginning of the LV *Surah*, "The Merciful", which reads:

> "It is the Merciful who has taught you the Qur'an. He created man and taught him articulate speech. The sun and the moon pursue their ordered course... He raised the heaven on high and set the balance of all things, that you might not transgress it. Give just weight and full measure."

The gift of language in a universe governed by order and moderation and the quest for honesty and justice in dealings between men—all these are different expressions of a single design. And it is through the Qur'an whose spirit permeates a whole system of learning that the Muslim receives his first initiation and gains his first apprehension of the world. The knowledge generated by the Qur'an reassures and liberates because it shows the way to the comprehension of things, to self-knowledge and recognition of others.

It is therefore a special kind of knowledge which frees man from the debilitating quest for absolute truth, which recognizes that progress is a continuing process and that its meaning and ends are justified only by the benefits it brings to humanity. The ideal of the perfect man wholeheartedly and unhesitatingly defending the rights of God and persevering in the performance of his duties lies at the heart of the extraordinary flowering of culture and the all-encompassing curiosity that incorporated and assimilated the wisdom and skills of past civilizations.

The exigencies of learning and the demands of humility are linked in the obligation to learn and to know, to understand and to pass on the results of research and knowledge, as is symbolically expressed in the parable of Moses related in the *Surah* of the cave.

According to tradition, Moses claimed to be the wisest among men. He came to realize his temerity when he met al-Khidr, "one of Our slaves to whom We had given of Our grace and of Our knowledge". (A slave, according to the Qur'an, is a man who fulfils his religious obligation, a pious man, who is the slave only of God and to whom is

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The *madrasah* ("school") was the university of the Islamic world in the first centuries of the *Hijra*. The curriculum was based largely on the Qur'an, the *Hadith* (see boxes pages 8 and 9) and Islamic theology and law, but other disciplines were also taught such as grammar, literature, mathematics, and sometimes medicine (with a hospital being attached to the *madrasah*). Education was free in the *madrasah*, which was supported by the system of *waqf* (pious endowments), and students were awarded bursaries and provided with lodgings. The teacher lectured from a pulpit while his pupils sat in a circle around him. Below, the great mosque of Qarawiyyin at Fez (Morocco) is the centre of one of the world's oldest universities, founded in 245 AH/859 AD. It stands in the heart of the *Medina* (old city). In 1960 the university's teaching activities were transferred to buildings outside the old city.

Photo Sabine Weiss © Rapho, Paris

ethics of learning

granted saving powers of mind, will and word.) What better reward for the passion of learning, what better fulfilment for the duty of knowledge than this pious man's meeting with Moses, who came upon him after a difficult quest!

"Moses says to him: Can I follow you on the true path, so that you may teach me a little of what you have been taught?" The notion of path is akin to the modern concept of method. But here the method is a path, not a ready-made formula for a solution. It is a way to be followed, a road along which one is led and to which one asks to be led.

The master, "Our slave", answered: "You will not be patient enough with me. How should you be patient when you do not understand?"

Learning calls for patience. Nothing is learned in haste. Learning means suspending one's judgment for a while. But the master does not refuse to teach, nor does the disciple scorn to follow. For both, the teaching relationship is maintained not by hierarchy but the difference of function.

Moses said: "If God so wills, I shall be patient and not disobey thee." Though Moses was a prophet and knew all that divine science could teach, he received this answer: "If you follow me, ask me no question unless I speak first."

A lesson in listening, but also and above all an exercise in the virtue of silence. Silence is a form of wisdom that few people practise. Without it one cannot reach one's inner self, and if one does not know one's self one is deaf to the words of others. This is the meaning of the parable: for the Qur'an the master/disciple relationship symbolizes the quest for knowledge at whatever price; the patience required to achieve it; the spiritual discipline needed to assimilate it; and meditation on its consequences.

The parable also teaches that insight entails foresight, and that the consequence of the act of knowing is part of the act itself. All teaching is seen in an ethical context. And the ethic holds good for all knowledge, sacred or profane, legal or medical, technical or theoretical. It is the basis of every method of acquiring and imparting knowledge.

The frequency of the terms *to know, to learn, to teach*, and the amount of literature about them show the importance of knowledge and its diffusion in Islam, as well as the realization that knowledge is bound up with human and social responsibilities and that the teacher's role, therefore, is always more ethical than technical. Hence the universal value for man of knowledge which affects his destiny, his fulfilment and the conquest within himself and outside himself of the dialectics of change.

The teacher/pupil relationship must therefore be exemplary. It is modelled on the transcendental—God taught Adam—and its meaning is confirmed by revelation; the Prophet, God's Messenger, is first and foremost a teacher, the *mu'alim*, we are told, of an almost illiterate and innumerate community.

Prisoners were set free if they taught ten Muslim children to read. And the Suffah mosque, built when the Prophet came to Medina at the beginning of the *Hijra*, whose anniversary we are now celebrating, was the first institution to teach "the Book and the Wisdom".

The unique quality of Islam is that it preserved both the transcendent and the human reference of knowledge by combining faith and knowledge without restricting the latter to revelation or—if such a distinction can be made—making it subservient to revelation's ends.

The logic inherent in faith teaches that "truth can be distinguished from falsehood", that it leads "from darkness to light" and embodies the rights of God and the rights of man, religion and scholarship. Hence the extraordinary versatility of the root *"ilm"* in the verb "to know" and its derivatives which can be applied at all levels and to all disciplines.

Islam's originality lies not only in the exceptional importance it attaches to knowledge, but also in the ceaseless quest for learning perceived and defined as a common heritage which no man may monopolize. Nothing is more foreign to Islam than a system that limits the use of knowledge or restricts its circulation submitting the flow of scientific or technical information to the needs of the market, of efficiency and profitability.

The belief that knowledge is designed for the entire community obliges the scholar to pass on his learning to all those who seek it. ➤

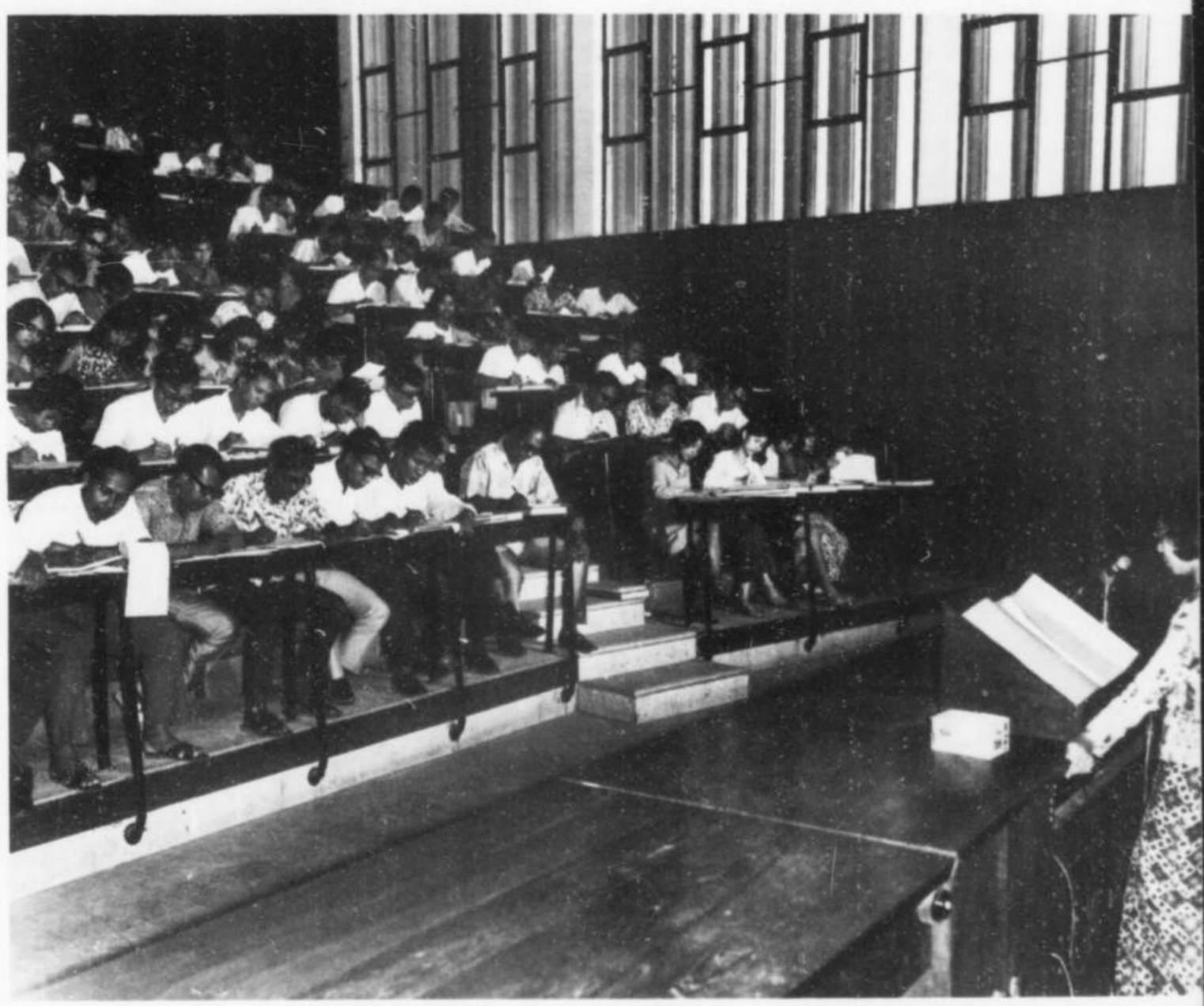


Photo © Malaysian Embassy, Paris

A lecture in progress at the University of Malaya, Kuala Lumpur.

That it represents a legitimate aspiration is shown in this appeal by one of the prophets: "Lord, increase my knowledge." That the scholar is worthy of respect is implied in this question: "Are they who know equal to those who know not?", and the Qur'an also bids us heed the scholar: "If you do not know, ask of them who do.".

Knowledge, moreover, signifies a never-ending learning process, an infinite possibility of improvement and progress. Islam tends to concentrate less on speculating about the nature of knowledge and on evolving a science of knowledge than on making it a "productive" reality, more important for what it aims at and for the changes it brings about than for what it is.

The fundamental relationship established between knowledge and action is based on this concept. Any act that contradicts knowledge calls knowledge itself into question. This idea is expressed in the popular saying: "Knowledge unapplied is like a cloud without rain". Though the delights of learning for its own sake are often proclaimed, knowledge must also be useful in the widest sense, serving the spiritual, intellectual or material needs of mankind. For reciprocity between diverse elements is part of the spirit of Islam, which combines secular education *(adab ad-dunia)* and religious education *(adab ad-din)* without losing sight of the difference between them.

Science and technology must be guided by practical principles compatible with man's destiny and the preservation of the heritage entrusted to him as God's lieutenant on earth, as the vessel of revelation responsible before God for Nature as well as for himself, since he has accepted the awesome honour of this mission before which "the mountains themselves drew back".

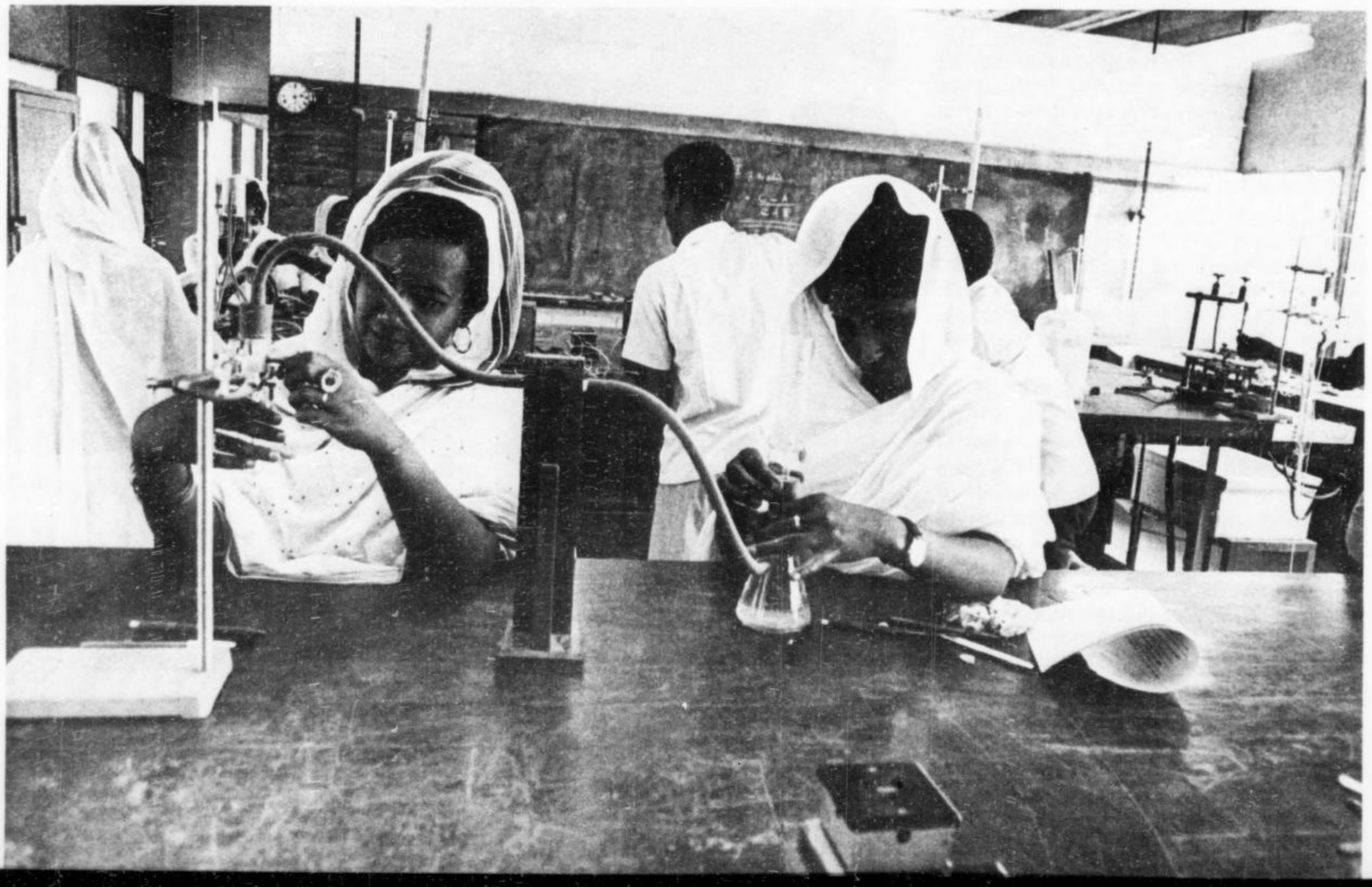
Knowledge was also inseparable from education, the *paideia* of the ancient Greeks. The notions of *'ilm* (knowledge/science) and of *'adab* (humanistic or moral training) are always related, as is shown by their derivatives *ta'lim* and *ta'dib,* signifying respectively education resulting in knowledge, and education as a way to enlightenment and to moral elegance. In other words: well-founded knowledge and a high sense of social obligations, an ideal which unites the defence of God's rights and the demands of life on earth. Or again: all that is needed for the complete develop-

Right, pupils in this rural primary school in Afghanistan learn to read and write and acquire a grounding in religion by learning verses from the Qur'an read out by their teacher. They are also taught geography, natural sciences and maths.

Photo © Laurence Brun, Paris

Students at work in a physics laboratory in Omdurman, Sudan.

Photo Jean Mohr, Unesco



ment of man's moral and intellectual personality.

The *'alim*, or man of learning, was a teacher before being a specialist. Knowledge cannot be reduced to information acquired from books and other sources. The teacher played such a vital role in the educative project of the community that the Qur'an exempted him from fighting in time of war. For the Muslim, he embodied an ideal that raised education and knowledge to the status of a social ethic and aesthetic. As a VI/12th century author expressed it: "Knowledge without education is like a fire without fuel; *'adab* without knowledge is like a mind without a body."

The master was a living example of what he taught, committed to the message he transmitted, a motive force for social change insofar as he himself was capable of change. One can see why folk wisdom has preserved the idea that knowledge proceeds out of the mouths of men—provided, of course, that such men be wise, accomplished and worthy to serve as an example. Above all, one can see that education is not just a diligent and studious apprenticeship but a socializing process—a training for living and being which is not limited to fighting ignorance but reforms the spirit, teaches it to be serene and spares it the torments of anxiety and all vain questings of the soul.

Thus Ibn-Hazm, seeking a goal that everyone could aim at, discovered only one: to rid oneself of anxiety or, as the Qur'an puts it, to find tranquillity, serenity and peace. Knowledge is the opposite, not only of ignorance, but also of stupidity, impatience and unreason (*humq*); as stated in an early VIII/14th century manuscript of a treatise on the superiority of knowledge over intellect (*Fi tafdil al-'ilm ala-l'aql*), it is serene, enlightened understanding much more than an "academic and intellectual" accomplishment.

Moreover, a distinctive feature of Islamic education is that it considers the way knowledge is transmitted to be as vital as its substance, whence the importance of the master/disciple relationship as an essential component in the handing down and recording of traditions. This explains the original kind of "diploma", the *ijaza,* awarded by a scholar to his disciple as a licence to teach. It is a certificate granted not by an institution but by an individual. Such a diploma was given to the explorer Ibn Battuta at Damascus in the year 726 of the Hegira by the learned Zeinab, daughter of Kamal ed-Din Ahmed, son of 'Abderrahim Al-Maqdisi.

Originally the *ijaza* was required only for teaching the *Hadith* or sayings of the Prophet. In order to attribute a given saying to the Prophet, the teacher had to have at his command a chain of reliable sources. He had also to be familiar with the traditions concerning other works existing in several versions, like Malik's classic work the *Kitab al-Muwatta,* and with the ways in which this information was handed on. The development of a methodology for ascribing books to their authors made it possible to extend the chain of evidence to nearly all important texts. It was not enough to get knowledge from books. One had to go to the sources, obtaining suggestions and advice from the scholar in person. This explains why scholars travelled so widely, as well as Islam's passion for knowledge and understanding.

Unlike similar phenomena at the time of the Renaissance, this eagerness to learn was not inspired by a desire for geographical conquest. Knowledge was not the concern of Conquistadores. It meant learning from a master, and the self-taught student had not yet become respectable. The word *tashif* means "falsification"; etymologically, it is related to *sahifa*, the page of a book, and, by extension, means someone who may use incorrectly a word taken directly from a *sahifa*. Learning acquired only from books was therefore not highly regarded in any of the sciences. Every journey into knowledge was a spiritual quest in which the community of scholars was united in time and space; it explains why Islam's method of apprenticeship was a spiritual voyage much more than a mere technical or intellectual process.

Implementation of the moral system described in treatises on the duties of teacher and taught, like that of al-Ghazali, who lived at the time when education was becoming institutionalized, was made easier by the fact that the teacher was free from administrative duties. He treated his pupils as if they were his own children, communicating to them his own delight in learning. As intellectual functions were separate from administrative tasks, teaching could be independent and flexible, unclouded by the fear of failure, and due account could be taken of each pupil's natural learning rhythm and rate of intellectual development.

For his part, the pupil was expected to reflect on the questions he was asked, for, according to the *tafdil* (see above), if one understands a well-framed question one is already half-way to its solution; the pupil should be freed from material preoccupations so as to devote himself entirely to study and was entitled in this respect to help from the community; he should avoid sterile argument and hasty judgments, and be able to sustain a discussion of conflicting viewpoints, weighing the force of different arguments and developing a dialectical approach; he should also be able to appraise the value of knowledge in practical terms, not allow himself to be discouraged by the difficulties of study and respect his master who would respect him as his own child.

The teaching ethic of Islam can be summed up in one word: dialogue. It is a perfect conversation between master and disciple, because what the one says is coloured and attuned by the attentive presence of the other. This teaching method fosters critical acuteness and envelops the subjects under discussion in that ideal atmosphere which makes debate one of the highest pleasures.

The ethic posits a world where there is room for everything, including poetry, which is more than a mere recreation. The creation of the *madrasah* (originally a centre for studying law) as a means of passing on knowledge provided an institutional basis for this teaching without diverting it from its true purpose.

The *madrasahs* were not created to satisfy the demands of a State ideology; they were conceived first and foremost as an act of piety. They solved the pupil's practical problems of board and lodging and provided teachers with a regular salary, but the State's intervention did not interfere with the schools' autonomy or with academic freedom.

The symbol of this academic freedom was the mosque, which had fulfilled this teaching role since the beginning of Islam. From the time of the Prophet, its classes or *halqa* had been centres of learning, and so they have continued to be until modern times at the al-Azhar mosque, in Cairo, the Qarawiyyin, in Fez, and the Zaytuna, in Tunis, as well as in rural *zawiyas* and in small local mosques which have always given religious instruction.

These study circles where the scholar sat side by side with the student and the craftsman, all united in a common quest for knowledge, existed in a wide variety of institutions. Teachers and pupils first met in the mosques—the *madrasah* proper was established only in the fifth century of the *Hijra* (11th century AD). But in the meantime "houses of wisdom" were created, the first at the time of Mu'awiya I whose reign began after the death of Ali in 40 AH/ 661 AD, and who we are told "devoted much time to study".

Houses of learning, libraries and observatories multiplied, broadening the scientific horizon of Islam, diversifying knowledge and creating specialities without ever severing links between the various sciences. A house of wisdom equipped with a library and run by a Shi'ite with a Hanafite scholar as director of studies would provide opportunity for interdisciplinary discussion. Such meetings were also organized by the *Majalis al-Nazar* or scientific councils composed of jurists from various law schools, as well as theologians and eminent traditionists.

Among specialized establishments, particular mention should be made of the *madrasah* where law *(fiqh)* was the chief subject of study. It was the home of *dars*, the law lesson. Originally, this took place in the *masjid* or mosque-school. But, unlike the *madrasah*, the *masjid* did not provide its students with board and lodging.

More generally, any place of prayer, any holy place, the tomb of a saintly person or a place of pilgrimage could be a centre of teaching. So could the *zawiyas*, centres of study run by a brotherhood, that linked together the poorest and the most far-flung regions of the rural world through a network of libraries and learning. This may explain the surprising fact that there was less illiteracy before the colonial era than after it. Foremost among the *zawiyas* were the famous centre at Tamagrout in south Morocco, the Ahmed Baba centre at Timbuktu, in Mali, and the *dara* (schools) of Senegal. They taught the Qur'an, law, tradition, *adab*, grammar, logic and arithmetic. For even specialized institutions could accept only pupils already proficient in humane studies and grammar.

The pupils could be children being initiated into religious and social life, town artisans, craftsmen, potential *faqihs* (theologians) or even masters' assistants. The teacher or *mudarris*, was primarily a specialist in law. He was assisted by a deputy or *na'ib* and by an under-master. Classes took the form of lectures, or commentaries on a text read aloud by one of the best pupils and explained, discussed and analysed as to subject and form by the teacher according to his speciality—law, tradition, logic, reading and study of the Qur'an, arithmetic, geometry and astronomy.

All these subjects were using the same methods up till a few decades ago in the mosques, *masjids,* cathedral-mosques or universities, or institutions like the ►

Qarawiyyin, where the Malaki school held sway, and the Zaytuna, which also taught Hanafite law, not to speak of astronomy for which there was a long tradition: one of the last astronomical treatises dates from the year 953 AH/1372 AD.

A popular practice in teaching was to use didactic poems, with a commentary given by the teacher. Some of these poems were so highly thought of that they were translated into Latin, like Ibn Sina's (Avicenna's) poem on medicine which begins by praising God who has given all men access to knowledge. Other poems dealt with grammar, logic, arithmetic, etc.

It is because of this continuing educational tradition and aim that Islam today is not a civilization of the past. While recognizing the value of other civilizations it has remained true to its own culture, to the ideal of educability.

From the earliest initiation into the Qur'an to the highest levels of study, the Islamic educational system, which expressed the scientific sensibility of a whole society, finds in this dual approach a path toward the universal and the assertion of its own identity. Whatever changes may take place in the system, and changes are taking place, they are not dictated by the need to adapt, but by the wish to strengthen and enrich itself, to preserve and assimilate the best wherever it may be found: God Himself revealed the Qur'an through repeated manifestations in the course of man's troubled history, a history which is not a series of disconnected events but a confrontation with the perils that man must sometimes face for his own good.

The Islamic ethic permeates the concept of education. Underlying it is the idea that man must change in order to change the world, for God changes nothing in men until they have changed what is in themselves. This calls for a return to the generalization of teaching, education and culture advocated by Islam—an essential precondition of any attempt at progress or renewal.

Islam is not an inquisitorial religion; "I have not been commanded to probe the hearts of men", says one of the Prophet's *Hadith*. It tends rather to exteriorize faith in cultural and social life, establishing a communal, but not a mass, culture, that is both responsible and inventive, ethical and scientific, and harnesses random progress to achieve ordered change. For change must have an object, a goal, that cannot be reached by technical means alone, but only if one enlists in its cause the human will, that spark which carries man's future through from age to age. No other light can guide those who believe man is capable of achieving the changes required of him. Like Moses in the parable, we must learn that to man is given little knowledge and perhaps much joy.

■ **Mohammed Allal Sinaceur**

COLOUR PAGES

OPPOSITE

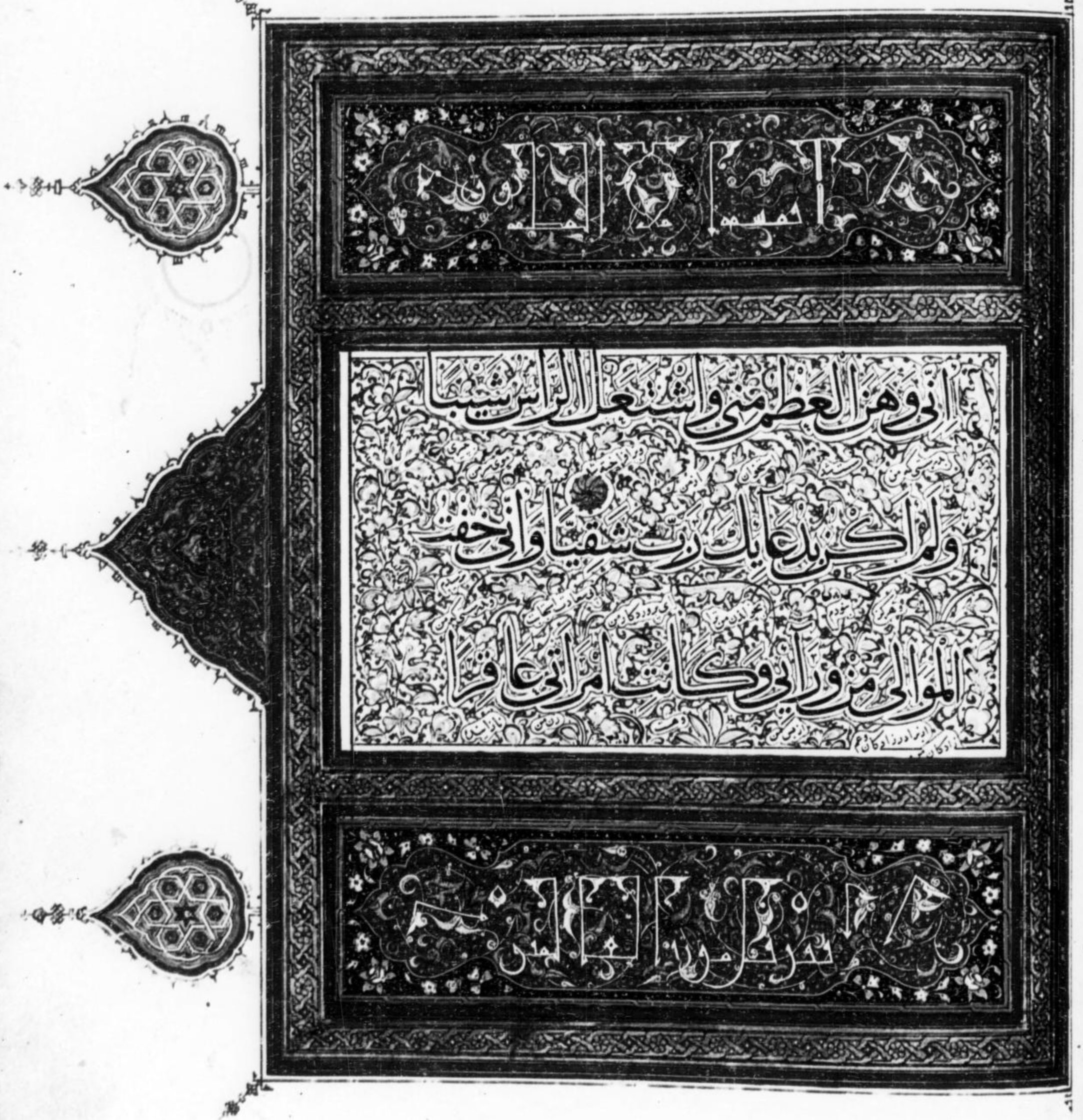
Jerusalem, a holy city for the three great monotheistic religions, is the site of two of Islam's most venerated mosques, al-Aqsa and (right) Qubat al-Sakhra (the Dome of the Rock). Built by the Umayyad caliph Abdul Malik (I/7th century) on a rock in the centre of the esplanade of the Temple, the site recalls the *Mi'raj*, the Prophet Muhammad's ascension to heaven, as well as the sacrifice of Abraham. Byzantine, Syriac and even Sassanid traditions are richly interwoven in the mosque, the first great achievement of Islamic architecture. The interior was originally decorated with a profusion of marble panels and glass mosaics in the form of plant motifs, necklaces, pendants and crowns which symbolized the triumph of Islam over the two great pre-Islamic empires of Byzantium and Sassanid Persia. Mosaics covering the exterior of the building were replaced in the 16th century by polychrome enamelled tiles in the Ottoman style. On 11 September 1981 the World Heritage Committee included the old city of Jerusalem and its walls on the World Heritage List.

Photo © Henri Stierlin, Geneva

CENTRE PAGES

The calligrapher used several different styles of writing in these pages of a Qur'an, open at the first verses of *Surah* XIX, which is thought to have belonged to the Ottoman Sultan Bayazit (886-918 AH/1481-1512 AD). The text itself is written in a style known as *muhaqqaq*, the rules of which seem to have been established by the great Turkish calligrapher Hammidullah (X/16th century). Between the lines is a translation into Persian written in the cursive *nashki* style of Arab calligraphy. The heading of the *Surah* (right hand page, above and below) is written in kufic, a very ancient style which has been used for decorative purposes in every age. The work shown here was one of a number of magnificent Qur'ans presented at an exhibition, "Splendours of the Qur'an", at Unesco Headquarters in Paris from 16 June to 3 July 1981. The exhibition was held in collaboration with the World of Islam Festival Trust as part of celebrations marking the 15th century of the *Hijra*.

Photo Pieters Davison International Ltd. © Chester Beatty Library, Dublin


الحمد لله
انى وهن العظم منى واشتعل الرأس شيبا
ولم اكن بدعائك رب شقيا وانى خفت
الموالى من ورائى وكانت امرأتى عاقرا
سورة مريم المكية

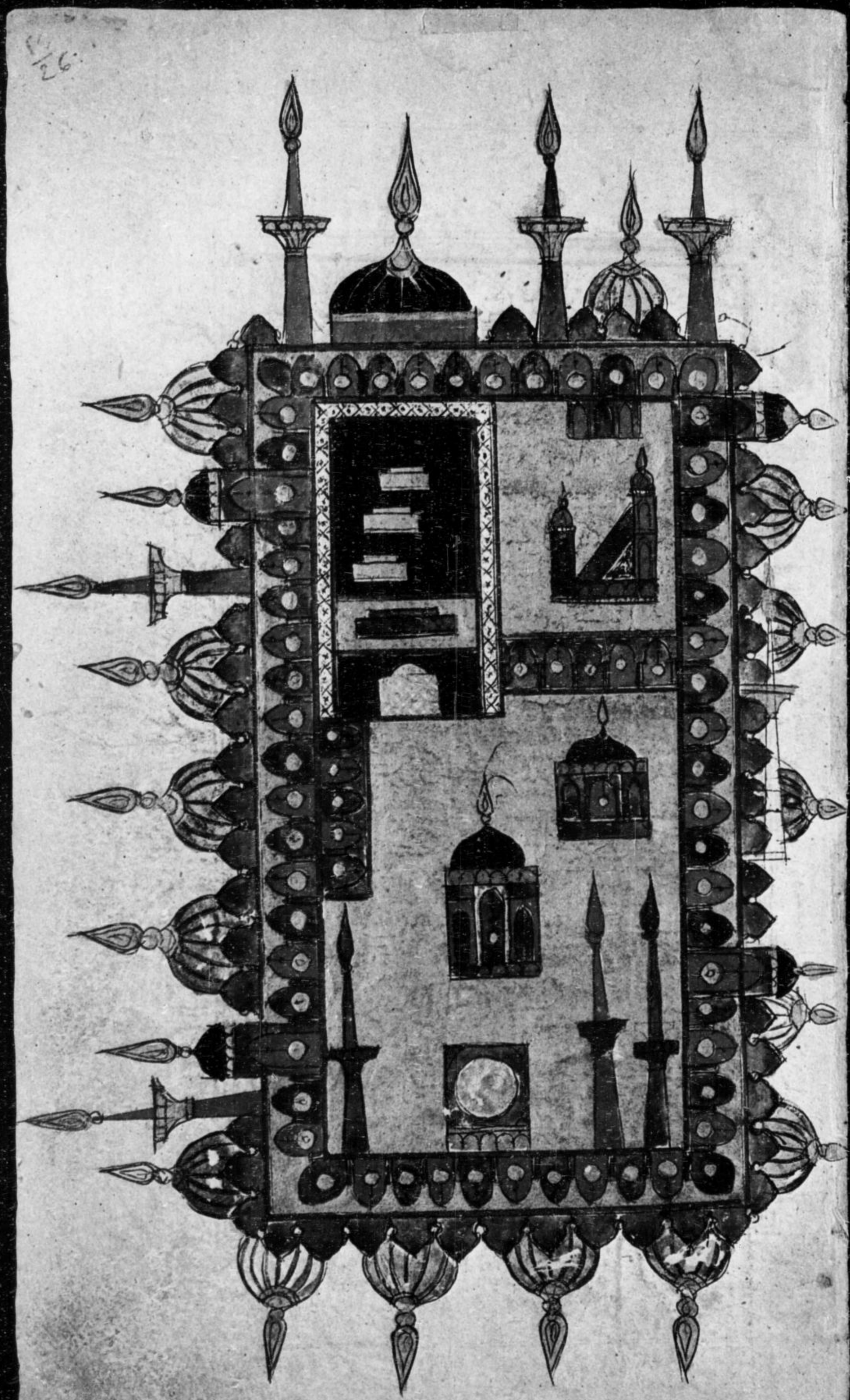
سورة مريم عليها السلام

بسم الله الرحمن الرحيم

كهيعص ذكر رحمت ربك عبده

زكريا اذ نادى ربه نداء خفيا قال رب

والسلام على من اتبع الهدى



The Hegira

by Hakim Mohammed Said

THE great nations of the world that have made a deep and lasting impression on history and civilization have always established their own calendar systems by which they fix the beginning, length, sub-divisions and the important dates of the year.

The Muslim calendar takes as its starting point the Hegira (*Hijra*), the Prophet Muhammad's journey from Mecca to Medina. The Arabic word *hijra* means "migration", but, because of its association with the Prophet it has become invested in Islam with a much wider and more deeply significant meaning. It has sometimes been wrongly translated as "flight" or "refuge", but primarily it connoted the breaking of the ties of kinship or association. To this pre-Islamic meaning, Islam added the sense of "breaking of the ties of kinship for the sake of God".

The Prophet started his mission in the year 610 AD, when he received the first revelation on Mount Hira, in the vicinity of Mecca. Soon he won over to his faith a small but devoted band of followers. As time went on, the Prophet attracted more and more adherents to his religion which, in turn, evoked strong opposition from the Meccans, especially from the oligarchy that controlled the economic life of the city.

As the opposition grew, it became fiercer and after thirteen years of ceaseless preaching and struggle it became obvious to the Prophet that his movement had reached deadlock and there seemed little hope of any early success against the obdurate opposition.

It was at this juncture that he decided to leave his native city, Mecca, and migrate with his followers to Medina, whose people promised him their help in carrying out his mission. The *Hijra* was now the only hope. But it was not an easy decision, however. For the infant Muslim community, it meant a great sacrifice in that they had to give up their homes and properties, their social contacts and blood relationships, their economic and commercial base, and all the privileges they enjoyed as citizens of the most developed and prestigious city in North Arabia, and settle in a city which had hardly any material opportunities to offer.

The motives for this migration were, therefore, a new and revolutionary concept of the sublimity of purpose, a noble cause, and sacrifice for the sake of God to protect His message and to convey it to mankind from a safer base.

This spirit of sacrifice as the motive for *Hijra* is reflected in many traditions of the Prophet and his companions. Thus, for example, a companion of the Prophet expresses his sentiments and those of others in these words: "I have left my kith and kin and my property making the *Hijra* towards God". Another tradition reads: "We have *Hijra* with the Messenger of God seeking the pleasure of God, The Most Blessed and the Most High."

When a Muslim leaves his house, and his kith and kin purely for the sake of God's pleasure he acquires a great spiritual and psychological force which enables him to overcome all his spiritual and material difficulties. If a man does not leave evil behind him, his *Hijra* is useless, as far as its results are concerned. Someone asked the Prophet, "O Messenger of God, which *Hijra* is the most excellent?" The Prophet replied, "The most excellent *Hijra* is that you denounce what your God is not pleased with."

In the light of these traditions Muslim scholars divide the *Hijra* into two aspects—the inward and the outward. Inward *Hijra* means the renunciation of all the evil temptations of the Self; outward *Hijra* means saving the religion from destruction by moving from one place to another.

Historically, however, the *Hijra* of the Prophet from Mecca to Medina in 622 AD, marked a turning point in his prophetic mission and a revolution in Islam. Externally, the Islamic movement assumed a new shape and formed a definitive community under a single chief. In Mecca Muhammad was a private citizen, in Medina the Prophet-Head of a community. In Mecca he had to limit himself to more or less passive opposition to the existing order, in Medina he organized a religious society. In short, the *Hijra* of the Prophet gave explicit form to what had hitherto been implicit. It ushered in a new era in the history of Islam.

It was because of this historical importance of the *Hijra*, along with its conceptual significance, that when the question of adopting an independent Muslim Calendar arose under the second Caliph, Umar Ibn al-Khattab, the companions unanimously voted to adopt the date of the *Hijra* as the beginning of the Muslim Calendar. They unanimously dismissed the important event of the Prophet's birth as the beginning of the Muslim era. They also chose not to mark its beginning from the day when the Prophet received his first revelation. Muhammad did not want to preach the faith only, he wanted to put "Faith in Action". And it was the *Hijra* which made this possible. In the entire history of Islam nothing can be compared with the event of the *Hijra* in historical importance, and in its ideological, social, political and cultural impacts. ■

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THE ISLAMIC CALENDAR

"It was He that gave the sun his brightness and the moon her light, ordaining her phases that you may learn to compute the seasons and the years."

(The Qur'an, X:5)

The Islamic Era is calculated from the year of the Hegira which took place in 622 AD by the Gregorian calendar. Following the guidance of the Qur'an which expressly makes the moon the measurer of time, the Islamic year is based on the moon and consists of 354 days divided into 12 lunar months which are 30 or 29 days long.

In each thirty-year cycle, years 2, 5, 7, 10, 13, 16, 18, 21, 24, 26, and 29 are leap years with an extra day added to the month Dhu 'l-Hidjdja.

Since the Islamic year is shorter than the solar year, the Islamic New Year moves backwards regressing through all the seasons every 32.5 years.

Days of the week

Yawm al-Ahad (Sunday)
Yawm al-Ithnain (Monday)
Yawm al-Thalatha (Tuesday)
Yawm al-Arba'a (Wednesday)
Yawm al-Khamis (Thursday)
Yawm al-Djum'a (Friday)
Yawm al-Sabt (Saturday)

Months of the year

Muharram
Safar
Rabi' I
Rabi' II
Djumada I
Djumada II
Radjab
Sha'ban
Ramadan
Shawwal
Dhu 'l-Ka'da
Dhu 'l-Hidjdja

Working out accurate correspondence between the dates of the Islamic and the Gregorian calendars involves fairly complicated calculations.

The date **Friday 30th of October 1981 AD (Anno Domini)** corresponds in the Islamic calendar to **Yawm al-Djuma 1 Muharram 1402 AH (Anno Hegirae),** the next Islamic **Ra's al-Sana** (New Year's Day).

Colour page, left

Ottoman style illuminated design (XII/18th century) representing Medina, known in Arabic as *Madinat al-Nabi* "the city of the Prophet" or simply as *al-Madina*, "the city". (See also photo and caption page 16).

Photo © Museum of Islamic Art, West Berlin

The scientific achievement

by Abdul-Razzak Kaddoura

# of early Islam

"In the creation of the heavens and the earth, and in the alternation of night and day there are signs for men of sense; those that remember Allah when standing, sitting and lying down, and reflect on the creation of the heavens and the earth, saying: Lord, You have not created these in vain. Glory be to You! Save us from the torment of Hell-fire..."

(The Qur'an, III:190, 191)

SCIENCE is man's endeavour to understand, by his own efforts, the world around him and himself. Muslims have always maintained that their faith not only did not hinder such efforts but that it expressly enjoined the believers to undertake them, and gave the necessary guidance for their success.

This striving after knowledge has been a constant commandment of Islam. It goes back to the very beginning of the Revelation. From that first memorable day until they succumbed for a time to external and internal ills, the Muslims never ceased to be at the forefront of science and technology. It is, of course, impossible here to do full justice to their great achievements and we shall only mention one or two highlights in the fields of mathematics, physics, medicine and chemistry.

Mathematics, according to the English mathematician Godfrey Hardy, is about beautiful patterns of logical thought. It is thus akin to music, poetry, painting and other arts which attempt to compose beautiful patterns of sounds, words, colours, etc. For Muslims, this pursuit of abstract mathematical harmony was particularly appealing and was directly linked with their practice of art and architecture, poetry and music.

Among the many advances made by Muslim mathematicians, the one that could be singled out is perhaps their elaboration of the positional notation for the expression of numbers, and, probably most important of all, the use of the concept and symbol of zero. This legacy has since become the foundation of our number system.

No major scientific advance is of course ever the product of a single individual or even of one culture. Science and technology are the result of continuous accumulation by successive generations of men and women from different parts of the world and are thus the truly common heritage of all mankind. This was beautifully stated by one of the greatest scientists of all times, Newton, when he said that if he was able to see further than his predecessors, it was because he stood on the shoulders of giants. Having said that, and due credit given to those from whom they borrowed, including the Babylonians, the Indians, and the Greeks, the achievement of the Muslims in handing down to us the present basis of our reckoning system is indeed of the very first magnitude. This is popularly recognized down to the present day by the name of Arabic numerals, a term in universal use.

There are other obvious traces of Muslim mathematics in contemporary terminology. One of them is the Word *algebra* which comes from the Arabic *al-Jabr* meaning the restoration of something incomplete. This mathematical discipline was perfected by the Muslims on the basis of earlier work.

The major contribution in this field was made by one of the greatest, perhaps the greatest, among Muslim mathematicians: Muhammad Ibn Musa al-Khwarizmi who lives on today in the modern concept of the "algorithm", a term derived from his name. His book entitled *Kitab al-mukhtasar fi hisab al-jabr wa'l-muqabalah* (The Concise Book on the Calculation of Restoration and Equation) introduced algebra to Europe through its Latin translation. The modern symbol for an unknown, x, is derived from *Shay* which is the Arabic word (meaning "thing") originally used in Muslim texts on algebra.

Trigonometry, another of the major mathematical disciplines, was essentially established by the Muslims. The word "sine", which designates the basic trigonometric function, is the direct translation of the Arabic original *jayb*. Many basic trigonometric relations were elaborated by Muslim mathematicians.

On the basis of Greek results, and in particular those of Euclid, the Muslims made great contributions to geometry. One of the most eminent Muslim workers in this field, although his modern fame does not recognize this essential facet of his genius, was Omar al-Khayyam. Another great Muslim geometer was Nasir al-Din al-Tusi, who wrote a commentary on the *Elements* of Euclid.

Like almost every noted Muslim philosopher, al-Tusi also devoted part of his writing to natural philosophy, which, in his day, included physics as well as the life and the earth sciences. The work of Muslim physicists was always characterized by a delicate sensitivity to fundamental theoretical principles (reflecting their admiration and reverence for God's creation) and a practical approach (devoted to catering for the needs of God's creatures).

Starting from a deep knowledge and criticism of Aristotelian natural philosophy (physics), Muslim scientists undertook a thorough examination of the foundation of this subject. The extensive correspondence exchanged between al-Biruni, the leading Muslim physicist, and the great Ibn Sina ►

Photo © Henri Stierlin, Geneva

The nilometer on the island of Roda in the Nile at Cairo was built in 246 AH/861 AD by the mathematician Ahmad Ibn Mohammed al-Faraghani on the orders of the Caliph al-Mutawakkil. The building was linked to the Nile by three tunnels and the central, graduated column enabled the floods of the Nile to be measured.

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(Avicenna) is a towering intellectual achievement where all physical concepts of the day are carefully analysed. It reminds one of the Einstein-Bohr correspondence on the interpretation of quantum mechanics.

The study of motion in particular, and of mechanics in general, led Muslim scientists to advance the solution of several important problems. Among these are the motion of projectiles, the concept of momentum (central to contemporary physics and which was developed by Ibn al-Haytham), the braking of the motion of a body by the material medium through which it moves, the fall of bodies under the action of the force of gravity, and the variation of the force of gravitational attraction between two bodies as a function of their distance. All these contributions, and many others too numerous to be mentioned here, paved the way for the major scientific revolution initiated by Galileo and crowned by Newton.

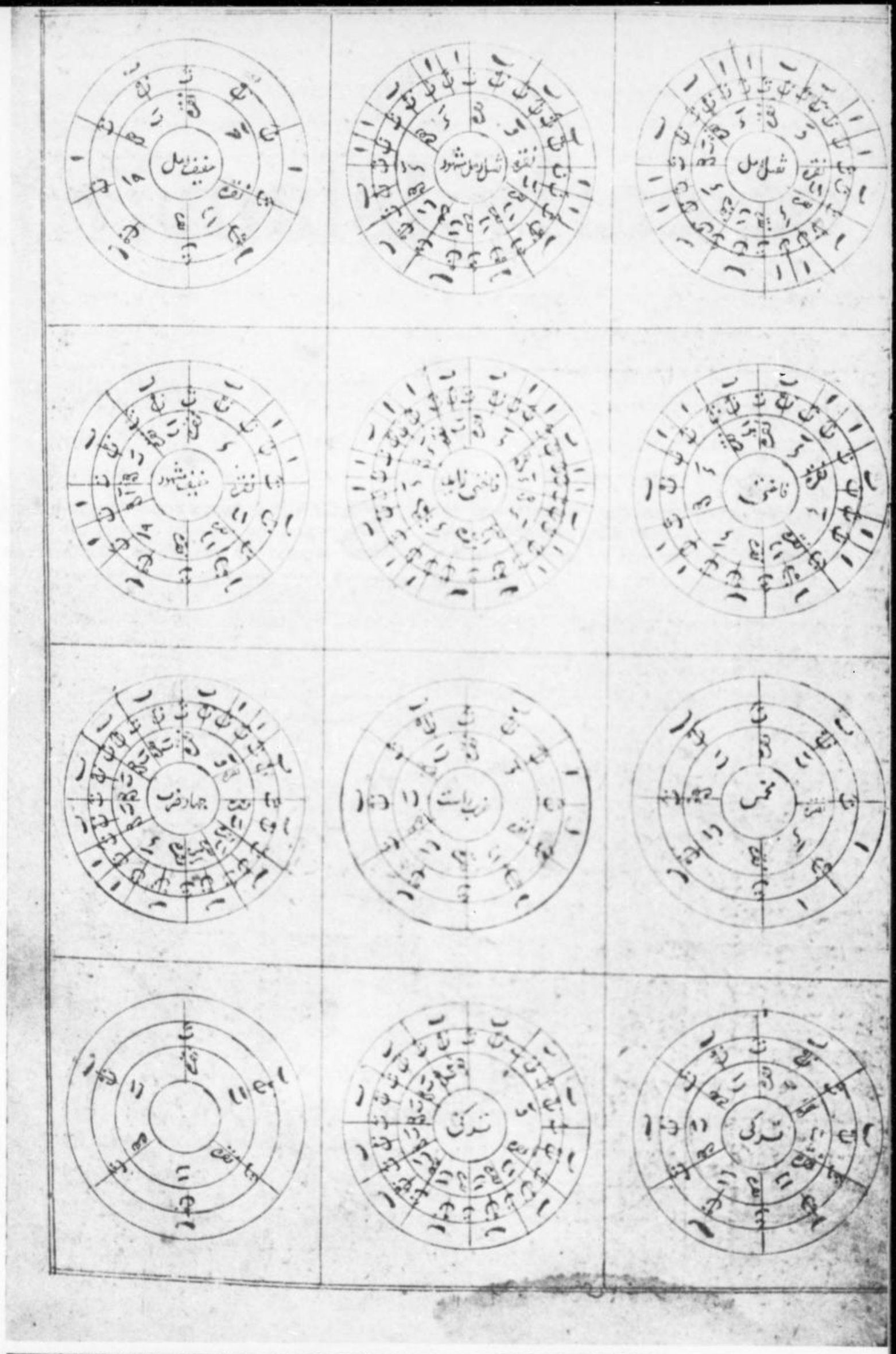
The science of optics was essentially established by Ibn al-Haytham (Alhazen) who is rightly called the father of optics. His *Kitab al-manazir* (The Book of Optics), which was translated into Latin, is considered to be the most important medieval work of its kind.

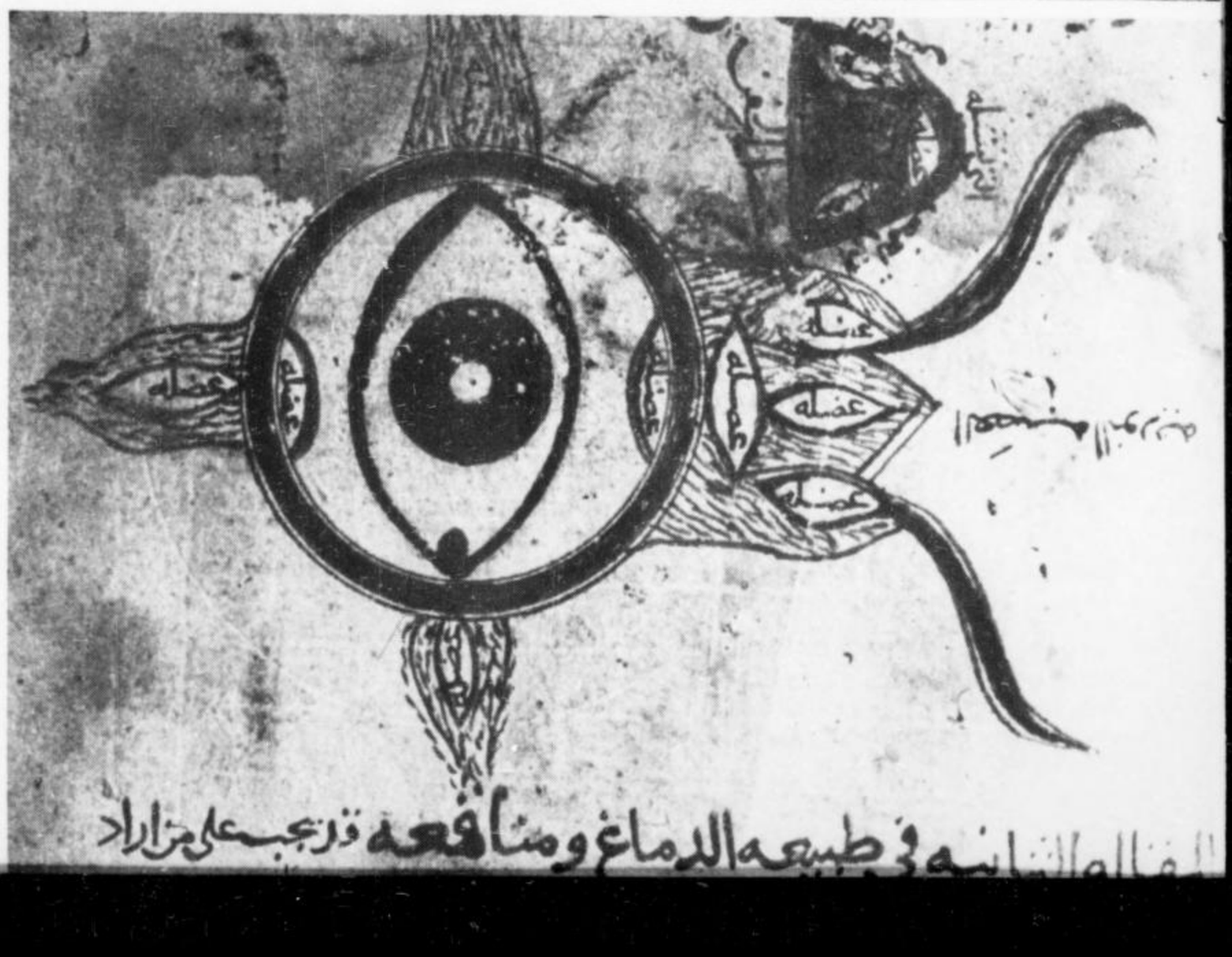
Among his many achievements are the study of atmospheric phenomena, parabolic and spherical mirrors and their aberrations (in connexion with which he gave his name to the famous Alhazen's problem whose solution requires that of a fourth degree equation which Ibn al-Haytham solved by geometrical methods), and the first enunciation of the minimum path principle for light which was later perfected by Fermat and became called by his name. Ibn al-Haytham also did fundamental work in the study of refraction, and discovered an approximation to its law which was later established by Snell and Descartes.

It is important to note that Ibn al-Haytham was, at the same time, a skilled experimentalist, building pieces of equipment with his own hands, and a consummate theoretician thoroughly familiar with the most sophisticated mathematical techniques of his day. By this blending of theory and experiment he anticipated modern science which was born, according to Bertrand Russell, from the merging of Greek speculation with Arab empiricism.

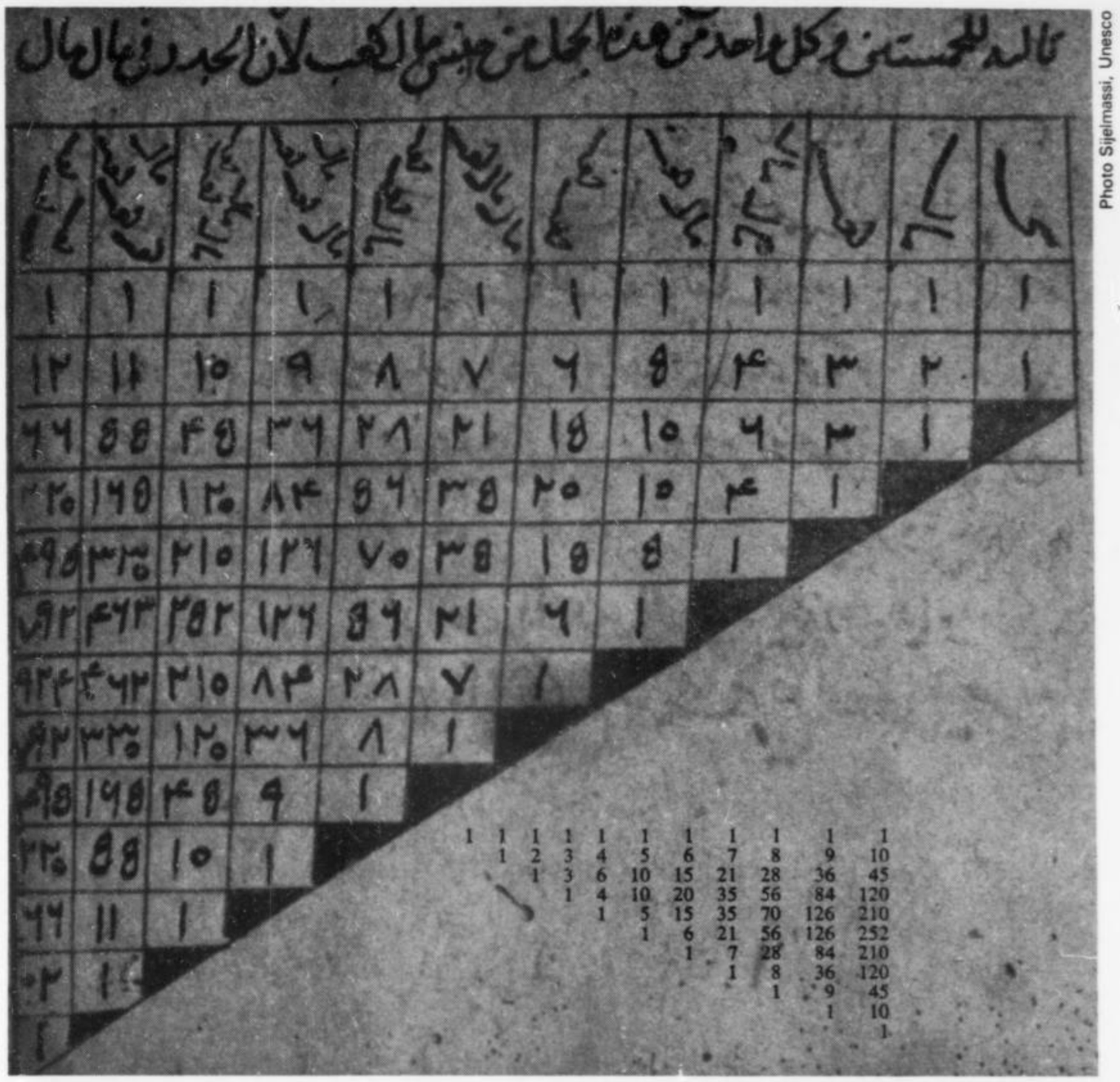
Ibn al-Haytham combined in his investigations the skills of a physicist with the art of a physician, and it was therefore natural that he should have studied human vision with particular effectiveness. He describes, with great precision, the various components of the eye, their individual functions and interrelationships. Rejecting the false tactile theory (according to which light is constituted by feelers emitted by the eye and used to detect the seen object), which was prevalent among pre-Muslim workers, he correctly maintained that the eye is only the receptor of light emitted by luminous bodies.

Care of the eye was a major interest of Muslim medicine. The ophthalmologist was a familiar character of the society of Islam. Under the name of *Kahhal* (from *Kuhl* which means Kohl), he simultaneously practised medicine, supplied (and sometimes even applied) make-up, and often acted as a confidant and counsellor. If modern knowledge leads us to ask whether "the eye is not an external extension of the brain", it is remarkable that this intimate link between





The mathematical table, right, is a detail from a VI/12th century manuscript, *Al-Bahir fi 'ilm as-Hisab* (The Book of Enlightenment on Arithmetic), written by the mathematician, doctor and philosopher As-Samawal Ibn Yahya al-Maghribi who died at Moragha in about 575 AH/1180 AD. It consists of a system of numbers, arranged triangularly, giving the coefficients of the expansion of the expression $(a+b)^m$, where *m* is a whole number. Inset right, the same table which is known in the West as Pascal's Triangle, after the famous French mathematician and writer Blaise Pascal who re-discovered it during the 17th century and was long thought to be its originator. In his manuscript, which is now preserved in the Hagia Sophia Library, Istanbul, al-Maghribi states that he copied the table from the works of the Arab mathematician al-Karaji who was born towards the end of the IV/10th century. Thus the Arab version of the table pre-dates Pascal's version by at least six centuries.



1 1 1 1 1 1 1 1 1 1 1
1 2 3 4 5 6 7 8 9 10
1 3 6 10 15 21 28 36 45
1 4 10 20 35 56 84 120
1 5 15 35 70 126 210
1 6 21 56 126 252
1 7 28 84 210
1 8 36 120
1 9 45
1 10
1

Photo Sijelmassi, Unesco

During the golden age of Islamic science, the theoretical aspect of music was regarded as a branch of mathematics and leading Muslim scientists, including Ibn Sina and Qutb al-Din al-Shirazi wrote whole treatises on music. The close links between music and mathematics is apparent in this page (above left) from the section on music of al-Shirazi's *Durrat al-taj*, an encyclopaedia of philosophy and science written in Persian. At that time science was not strictly compartmentalized as it is today and most of the leading figures of Islamic science were at home in several disciplines. The great physicist Ibn al-Haytham also made his mark as an astronomer and a meteorologist and was known as "the father of optics". A qualified physician, he took a special interest in ophthalmology and was one of the first to recognize that the eye was a receptor of light emitted by luminous bodies. Below left, diagram of the human eye from a treatise on ophthalmology now in the Egyptian National Library, Cairo.

Photos Roland and Sabrina Michaud © Rapho, Paris

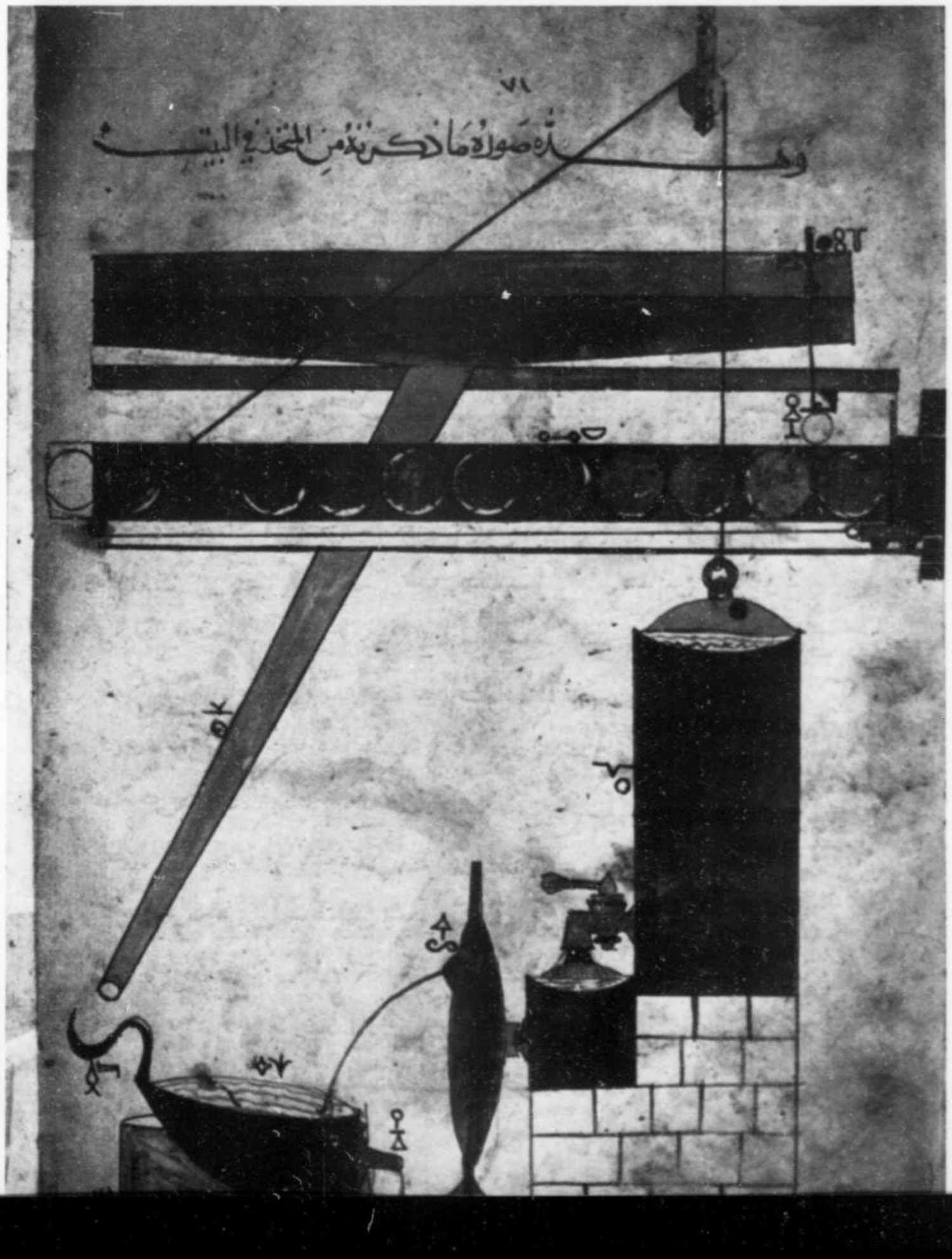


Photo © The Metropolitan Museum of Art, New York, Bequest of Cora Timken Burnett

Around the VII/13th century, many Muslim scientists were fascinated by complicated mechanical devices, gadgets and automata such as those described in the *Kitab fi ma'rifat al-hiyal al-handasiyyah* (The Book of Knowledge of Ingenious Mechanical Devices), written in 602 AH/1206 AD by the engineer al-Jazari. Right, illustration of one of his hydraulic devices which he describes laconically as "for use in the household".

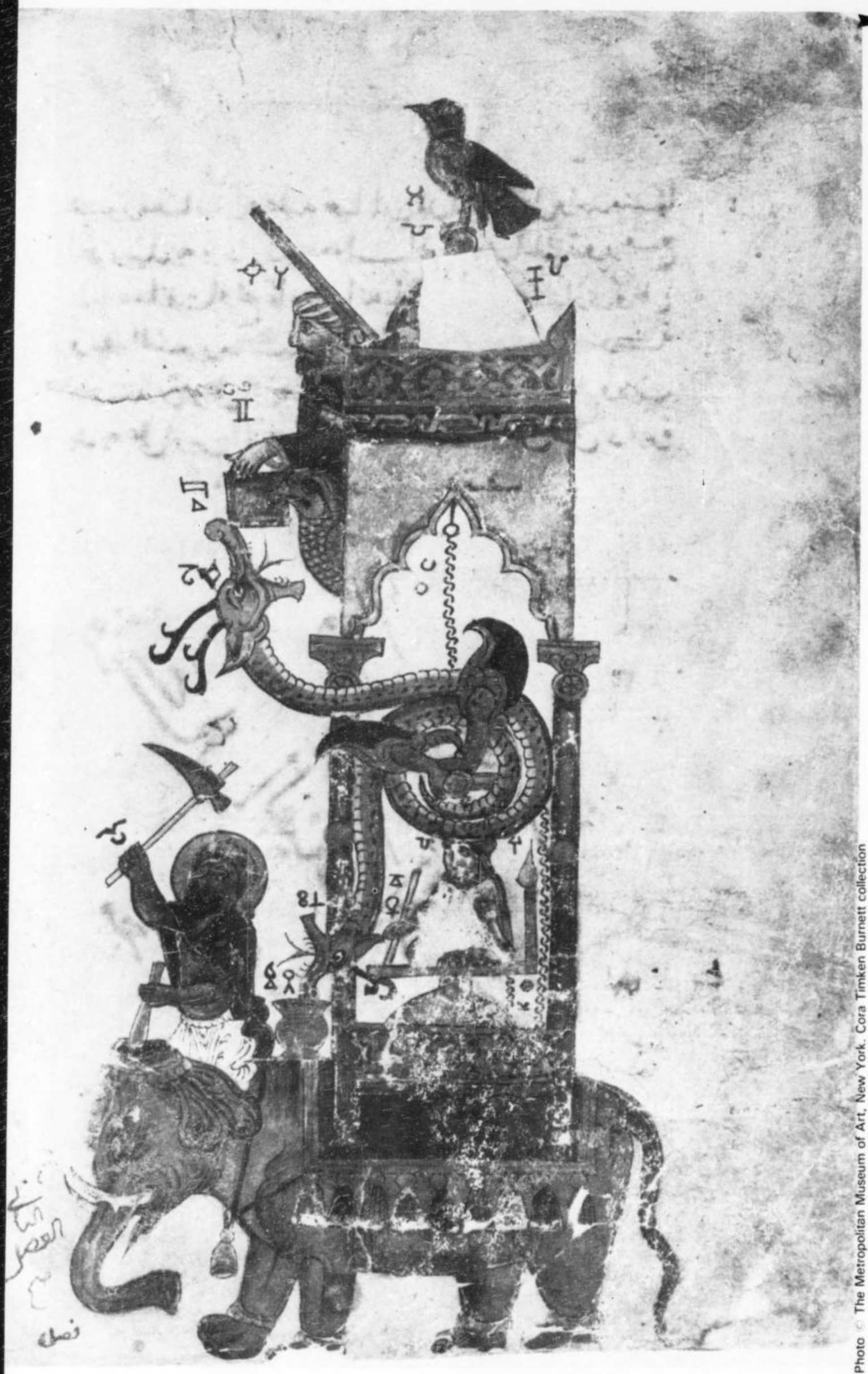


Photo © The Metropolitan Museum of Art, New York. Cora Timken Burnett collection

The "Elephant CLock", an illustration from a version of al-Jazari's Book of Knowledge of Ingenious Mechanical Devices dated 715 AH/1315 AD. The clock is a marvel of ingenuity. Time is indicated on a scale to which the figure in the howdah points and by openings (not visible) under the canopy that change from black to white every hour. Every half hour the bird at the top revolves and whistles, the mahout strikes the elephant and the figure above the falcon causes the latter to drop a pebble into the dragon's mouth. The dragon's head drops down carrying the pebble to a vase on the elephant's back and the pebble falls inside the elephant where it strikes a gong.

the two was at the centre of Muslim ophthalmology.

Arabic has supplied Latin, and through it other European languages, with a rich terminology. One of the most authoritative treatises on the subject is *Tadhkirat al-Kahalin* (The Handbook of Ophthalmologists) written by the famous Ali Ibn Isa who was the first to propose the use of anaesthesia in surgery.

But the name that comes most naturally to mind when one speaks of Islamic medicine is that of the "prince of physicians", the great Abu Ali Ibn Sina (Avicenna). A child prodigy who memorized the Qur'an at a very early age, he was self-taught in many subjects. A scholar of admirable self-discipline and vast learning, he wrote works which remained for centuries the standard references for medicine both in Islamic countries and in Europe. His *al Qanun fi at-tibb* (the Canon of Medicine) has had incomparable influence on medical practice and theory. It was translated into many languages and remained, until the late Middle Ages, the foremost medical treatise. It was based on the best knowledge available in Ibn Sina's time, including, in particular, his own observations and discoveries which included the important results he obtained in the study of epidemiology (applied for example to tuberculosis), of meningitis (which he was the first to describe), and of psychic disorders.

Most, if not all, Muslim men of science were highly versed in several scientific disciplines, in addition to being often at home in other branches of knowledge including philosophy, literature and one or several of the arts. This general rule is nowhere as true as in the case of Muslim physicians. Many of them, and certainly their leaders, such as Ibn Sina (Avicenna), Ibn Rushd (Averroes), al-Kindi, and al-Razi were truly encyclopaedic men partaking of practically all fields of knowledge of their times.

It is no coincidence that the Arabic word in common use today to designate a physician *(tabib)*, coexisted, during many centuries, with another word *(hakim)* whose precise meaning in Arabic is "sage". Although *hakim* is less often used today than *tabib*, particularly among the educated people in countries where Arabic is the native language, its use has by no means disappeared and may in fact be re-asserting itself with the present trend towards a return to cultural roots.

This unity of the various sciences, embodied in the polyvalence of their most eminent practitioners, was also reflected in the conjunction of their transmission to the students. Many of the hospitals, which were a distinctive character of the Muslim world, had schools *(madrasahs)* attached to them where the future physicians were trained in the theoretical aspects of their art, while the clinical side was catered for by practical service in the hospitals.

The hospitals were often, and certainly in the case of the most important ones, academic and professional institutions of a very high standard. They possessed in addition to the usual components, libraries, lecture halls, living quarters for the teachers, the students, and most of the technical supporting staff, and many other facilities. The institution of *waqf* (an endowment or trust fund), which played such an important role in Muslim life, ensured that the hospitals

Photo © Kunsthistorischen Museum, Vienna

Cape specially woven for King Roger II of Sicily on the occasion of his coronation in 525 AH/1130 AD, some forty years after the end of a period of 200 years of Muslim rule in the island. It is bordered with a woven Arabic script in which is recorded the date of its manufacture as well as a prayer for the king couched in traditional Arabic terms. Islamic textile designs and techniques spread from Sicily throughout the West and Turkish, Persian and Arab designs are still current in Europe today.

had dependable and continuous means of support.

Medicine is of course much more than medical science, and to describe the many contributions of the Muslims to its various facets as a science, a healing art and a social service, would be a formidable task. It should be stressed, however, that Islam has a rich tradition enjoining upon the believers a code of personal and collective behaviour conducive to a healthy state. The Qur'an and the traditional *Hadiths* of the Prophet give numerous and clear instructions about personal hygiene (in particular through the ablutions and in preparation for prayer), dietary habits ("We, as a people, do not eat until we feel hungry, and when we do eat, we stop short of satiety", says one *Hadith*), physical exercise ("Teach your children swimming, archery, and horse-riding", commands another), and many other guidelines ensuring a healthy mind and body.

Two social practices deserve particular mention. One is the dispensation of medicinal and other drugs which is the business of the druggist *(al attar)* who often acted also as an auxiliary medical practitioner (barbers also filled this latter function in part). The other is the very important institution of the public bath *(al hammam)* which was a major meeting place acting at the same time as a club (used alternately by the two sexes) for social entertaining and festivities, as a cleansing place and as a forum for some kind of physical and psychological relaxation for people going or having just gone through periods of physical and/or mental stress. An interesting instance of this last aspect is the universal practice, which has waned in recent times, of taking women to the *hammam* a certain period after their giving birth, in a big group of relatives, for a purificatory and festive ceremony.

The notion of birth underlay the work of the Islamic alchemists who, according to Seyyed Hossein Nasr, in his book *Islamic Science*, saw "the ideal of alchemy as a form of obstetrics which delivers gold from the bosom of nature".

Although alchemy should not be regarded as a kind of protochemistry, the history of chemistry is inseparable from it. The study of chemistry was started by the Muslims in their earliest days, but it was mainly the philosopher, physician and alchemist Jabir bin Hayyan (also known as Geber) who made the first major Muslim contribution to chemistry. Jabir bin Hayyan lived in the second century AH (eighth century AD) and wrote an impressive number of books among which *Kitab al-Sabin* (book of the seventy), and *Kitab al-mizan* (book of the balance) are of particular importance.

The next major Muslim chemist is Muhammad ibn Zakariyya al-Razi who was also an outstanding physician. It was he who proposed the classification of substances into mineral, vegetable and animal categories. He is credited with important advances in the study of several chemical processes including that of distillation. It is believed that he was the first to extract alcohol from fermented substances and to use it for medical purposes. The word alcohol is of Arabic origin. The original word could be *al Kuhl* (meaning Kohl) or *al gaoul* (mentioned in the Qur'an and probably denoting the objectionable ingredient in wine).

The present state of Islamic science is of course far from comparing favourably with its prestigious past. But this sad situation (for the Muslims and for the world as whole) should not lead to an excessively unfavourable assessment of science and technology in *Dar-il Islam* (The Domain of Islam). One must recall first the impressive numbers of Muslim scientists and engineers already practising, or being trained, in all the countries of the vast Muslim world. It is beyond all doubt that this generation, and the next one, will produce, because of their sheer numbers, many outstanding scientists, some of whom are already among us (Professor Abdus Salam was awarded the Nobel Prize in Physics for 1979 and is thus the first Muslim scientist to have achieved this distinction).

Islamic countries are, for their part, increasingly aware of the fact that the renaissance of Islam is linked with a new flowering of science and technology within the *Umma* (the Islamic Nation). They recall the *Hadith* of the Prophet (May God bless Him and give Him peace): "The end of this Nation will only be secured through what secured its beginning". Muslim countries are therefore determined to work not only individually but, more importantly, collectively, and in co-operation with all other nations of the world, to contribute to the development of science and technology. They have recently founded the Islamic Foundation for Science, Technology and Development, whose Director-General is an eminent Muslim scientist, Dr. Ali Kettani. The Foundation has at present a modest budget of fifty million dollars, but a significant fraction of the Islamic Fund for Development, which amounts to two thousand million dollars will, as was stated at the Islamic Summit Conference in Taif in January 1981, be used for science and technology. On this road to scientific and technological renewal, the Muslims recite reverently the words of God:

"And say: My Lord,
Lead me in with a just ingoing, and lead me out with just outgoing; grant me authority from Thee, to help me".
(XVII: 80)

■ **Abdul-Razzak Kaddoura**

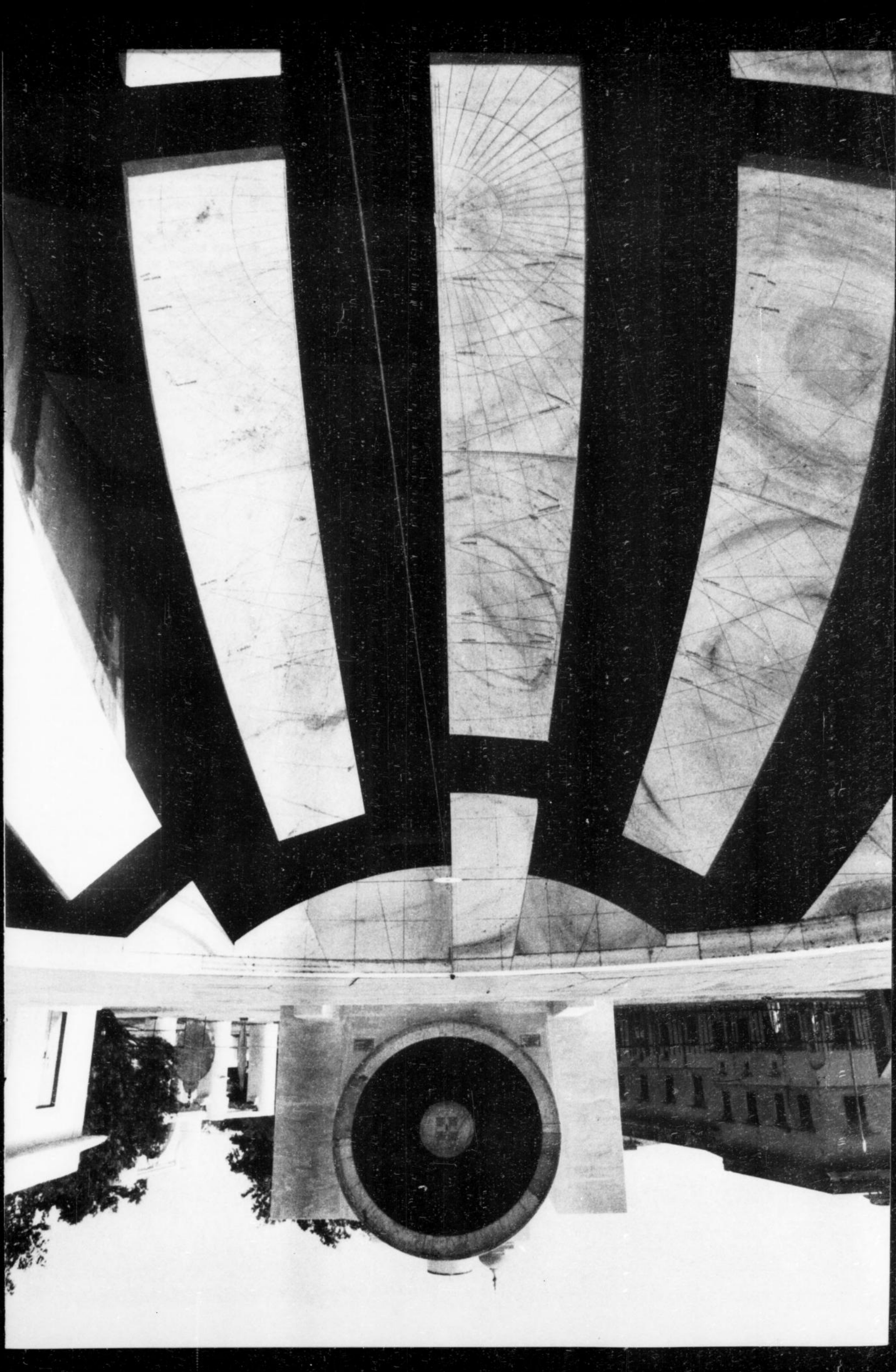


Photo Georg Gerster © Rapho, Paris

Ummat ul-ilm Towards a Commonwealth of Science

by Abdus Salam

"Allah is He who made (it possible) for you (to acquire) mastery over the ocean; thus (your) craft can ply thereon, with Allah's command... Allah is He, who gives you subjection over all that is in Heaven and on Earth: Herein are Allah's signs for peoples given to reflection."

(The Qur'an, XLV: 12,13)

Built by the Indian Prince Jai Singh in the XII/18th century, the observatory at Delhi, left, though it incorporated elements of Hindu astronomy, basically continued the Islamic tradition of observatory building as represented by the great observatories at Maragha (VII/13th century), Samarkand (IX/15th century) and Istanbul (X/16th century). The Maragha observatory, with a staff of twenty astronomers drawn from all over the Islamic world directed by the great scientist Nasir ad-Din at-Tusi, was probably the world's first observatory in the full sense of the word.

THROUGHOUT the ages, man has reflected on nature, attempted to discover its laws, and sought to subdue it. The Holy Qur'an, by repeated injunction and illustration from natural phenomena, enjoins the twin pursuits of reflection on *(taffaqur)* and mastery over nature *(taskheer)* as bounden obligations of the Muslim community. Following these injunctions, barely a hundred years after the Holy Prophet's death, the Muslims made it their task not only to master the then known sciences; they also acquired an ascendancy, in the creation of the sciences, which lasted over the next six hundred years.

In his monumental *Introduction to the History of Science*, George Sarton divides his story of achievement into ages, each age lasting half a century. With each half century he associates one central figure. The period 450-400 BC he calls the Age of Plato; this is followed by the half centuries of Aristotle, of Euclid, of Archimedes. From 600 AD to 700 AD is the Chinese century of Hsiian Tsang and the I Ching and then from 750 AD to 1100 AD—350 years continuously—it is an unbroken succession of the Ages of men belonging to the culture and the Commonwealth of Islam: Jabir, Khwarizmi, Razi, Masudi, Wafa, Biruni and Omar Khayyam—Arabs, Turks, Afghans and Persians—chemists, algebraists, clinicians, geographers, mathematicians, physicists and astronomers.

Only after 1100 AD in George Sarton's story of science, appear the first Western names—Gerard of Cremona, Roger Bacon—but the honours are still shared for another 250 years with men like Ibn Rushd, Nasir-ad-din at-Tusi and Ibn Nafis, the man who anticipated Harvey's theory of circulation of the blood.

Of the high level of achievement, the following, taken from my own subject of physics, may serve as examples.

Contrary to the views of the Greeks, "Ibn-Sina (Avicenna, 370-428 AH/980-1037 AD) regarded light as an emission by the luminous sources of particles travelling at finite speed; he understood the kinetic nature of heat and of force and motion".

His contemporary, Ibn al Haytham (Alhazen, 354-430 AH/965-1039 AD), one of the greatest physicists of all time, besides making experimental contributions in optics, "enunciated that a ray of light, in passing through a medium, takes the path which is the quicker, anticipating Fermat's Principle of Least Time. He understood the Law of Inertia, later to become Newton's first law of motion. He described the process of refraction in mechanical terms by considering the movement of a particle of light as it passed through the surface of separation of two media, in accordance with the rectangle of forces—a mode of approach independently discovered later and elaborated by Newton".

Al-Biruni (362-439 AH/973-1048 AD), a great experimenter like his contemporary Alhazen, was as modern and as post-medieval in outlook as Galileo with whom he shares the independent (and prior) discovery of the Galilean invariance of the laws of Nature. Al-Biruni's comments on scientific methodology in his famous review of Indian science and his correspondence with Avicenna on the subject of elementarity of fundamental particles, might have been written today, such is the freshness of Al-Biruni's mode of reasoning.

Qutb-al-Din al-Shirazi (633-710 AH/1236-1311 AD) and his pupil Kamal-ud-Din, gave the first explanation of the rainbow, stated that the speed of light is in inverse ratio to the optical (not material) density of the medium; and that hyperboloidal lenses avoid spherical aberration.

It should not be forgotten that these men were not just physicists; they made equal or greater contributions to medicine, mathematics, geology, philosophy and astronomy.

Three reasons can be given to explain why, during their Golden Age in the II/8th, III/9th, IV/10th and V/11th centuries, the Muslims searched for and developed the sciences to such a high level. First and foremost the Muslims were following the repeated injunctions of the Holy Book and the Holy Prophet. According to Dr. Mohammad Aijazul Khatib of Damascus University: "In contrast to 250 verses which are legislative, some 750 verses of the Holy Qur'an exhort the believers to study Nature, to reflect, to make the best use of reason and to make the scientific enterprise an integral part of the Community's life".

The second reason, connected with the first, was the status accorded in Islam to men of knowledge and science *(Alims)*. The Qur'an emphasizes the superiority of the ►

ABU AHMAD MOHAMMAD ABDUS SALAM BIN HUSSAIN, *FRS, of Pakistan, was awarded the Nobel Prize for Physics in 1979 for work in electromagnetic interaction between elementary particles. He has been professor of theoretical physics at the Imperial College of Science and Technology in the University of London since 1957, and is founder and director of the Unesco-sponsored International Centre for Theoretical Physics, Trieste. In the article above, quotations from the Qur'an are from the translation by A.J. Arberry.*

Photo Jean-Claude Bernath, Unesco

Left, Persian brass astrolabe dating from the XI/17th century. Astrolabes were used in computing the position of the stars and the movement of the planets, as a means of telling time, and as navigational instruments. They date back to before Islam, but were vastly improved by Muslim astronomers. Right, diagram from an Arabic manuscript, dated 602 AH/1205 AD and now in the Topkapi Museum, Istanbul, which explains the working of the astrolabe.

Alim—one possessing knowledge and science—by asking how those without such attributes could ever be the equals of those who do? The Holy Prophet of Islam gave the proud title of "Inheritors of Prophets" to believing men of knowledge and science for they were the ones who could recognize Allah's design and its sublimity. Absolutely explicitly he said: "The quest for knowledge and science is obligatory upon every Muslim —man and woman". He further enjoined his followers to seek scientific knowledge even if it be in far Cathay.

An aspect of this veneration for sciences was the patronage extended to their creation in the Islamic-Arabic Commonwealth. To paraphrase what the orientalist H.A.R. Gibb has written about Arabic literature to the parallel situation for Sciences: "To a greater extent than elsewhere, the flowering of Sciences in Islam was conditional... on the liberality and patronage of those in high positions. Where Muslim society was in decay, science lost vitality and force. But so long as in one capital or another princes and ministers found pleasure, profit or reputation in patronizing sciences, the torch was kept burning".

A third reason for the success of the scientific enterprise in Islam was its international character. Not only did the Islamic Commonwealth itself cut across nation and colour, the early Muslim society was also the most tolerant of those from outside of it and their ideas. As al-Kindi wrote eleven hundred years ago: "It is fitting then for us not to be ashamed to acknowledge truth and to assimilate it from whatever source it comes to us. For him who scales the truth there is nothing of higher value than truth itself; it never cheapens nor abases him who seeks".

After the beginning of the VI/12th century, science in Islam started to decline; by 750 AH/1350 AD the decline was complete. Why did we in Islamic lands lose out? No one knows for certain. There were indeed external causes, like the devastation caused by the Mongols, but, grievous though it was, it was perhaps more in the nature of a temporary interruption. Sixty years after Ghengiz, his grandson Halagu was founding an observatory at Maragha. In my view, the demise of living science within the Islamic Commonwealth was more due to internal causes.

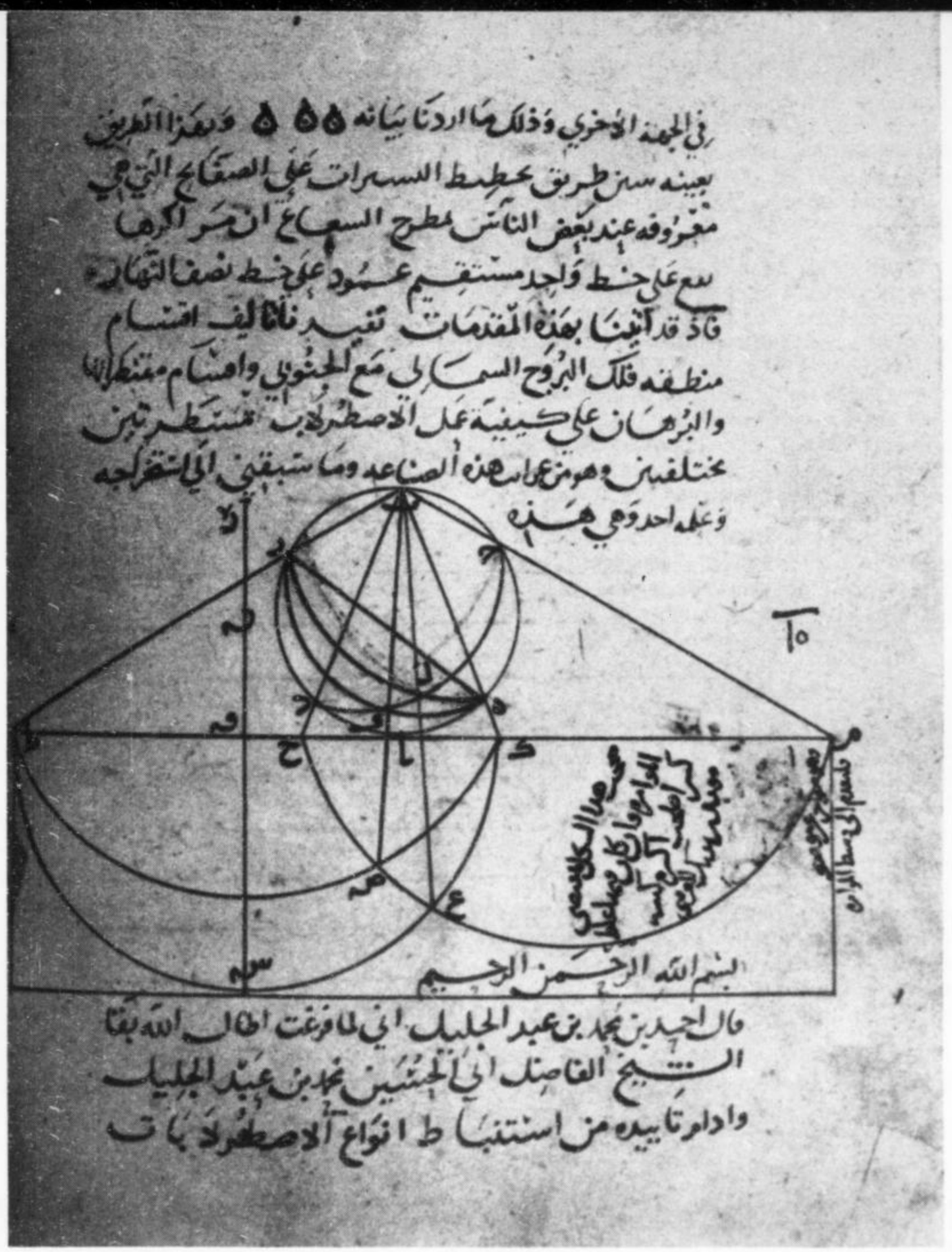
To illustrate this let me quote from Ibn Khaldun (732-808 AH/1332-1406 AD) one of the greatest social historians and one of the brightest intellects of all times in his field. Ibn Khaldun writes in His *Muquddimah* (Introduction to History):

"We have heard, of late, that in the land of the Franks, and on the northern shores of the Mediterranean, there is a great cultivation of philosophical sciences. They are said to be studied there again and to be taught in numerous classes. Existing systematic expositions of them are said to be comprehensive, the people who know them numerous and the students of them very many... Allah knows better, what exists there... But it is clear that the problems of physics are of no importance for us in our religious affairs. Therefore, we must leave them alone" (1).

Ibn Khaldun displays no curiosity, no wistfulness, just apathy, bordering on hostility. This apathy led to isolation. The tradition of al-Kindi, of acquiring knowledge from wherever it could be obtained and improving on it, was forgotten. The Muslim world of science sought no contacts with the West where sciences had now begun to be created.

Five centuries before, Muslims had avidly sought knowledge first from the Hellenic and Nestorian colonies of scholars at Hundishapur and Harran, where translations were made from Greek and Syriac. They had then founded in Baghdad, Cairo and elswhere international institutes of advanced study, *Bait-ul-Hikmas*, and international observatories, the *Shamsiyyas*, at which

(1) See translation by F. Rosenthal Vol .III, pages 111-112, 116-118, 153-155 and 246-253. Routledge and Kegan Paul, 1958.


في الجهة الأخرى وذلك ما اردنا بيانه ٥٥ ٥ وبهذا الطريق
يعينه سلك طريق تخطيط السمتيات على الصفائح التي هي
معروفة عند بعض الناس بمطرح السباع ان مر اكرها
سبع على خط واحد مستقيم عمود على خط نصف النهار
فاذ قد اتينا بهذه المقدمات نتبعه نأتي باقسام
منطقة فلك البروج السمالي مع الجنوبي واقسام ممتطرا
والبرهان على كيفية عمل الاصطرلاب ممتطرتين
مختلفين وهو من عوائد هذه الصناعة وما سبقني الى استخراجه
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قال احمد بن محمد بن عبد الجليل اني لما فرغت اطال الله بقا
الشيخ الفاضل ابي الحسين محمد بن عبد الجليل
وادام تاييده من استنباط انواع الاصطرلابات

Photo Sijelmassi, Unesco

congregated scientists from all lands, creating new knowledge.

Such international concourses had begun to be assembled from around the beginning of the VII/13th century in the West, starting with Toledo and Palermo where translations were feverishly made from the then prestigious language of science, Arabic. Thus a candle was lighted in the West from a candle then burning brightly in the lands of Islam. But there was no converse movement in Islamic lands, which maintained the most superficial scientific contacts with science elsewhere.

To complete the story, from Ibn Khaldun's day this intellectual isolation continued, even during the great Empires of Islam, the Empires of the Osmanlis, of the Safvis, and of the Moghuls. The very encyclopaedic nature of knowledge and science in Islam was now a hindrance, for any science that was cultivated was concentrated in religious seminaries, where tradition was valued more than innovation.

It was not that the Sultans and the Shah-in-Shahs did not know of the technological advances being made by the Europeans. They could hardly be unaware of the intrusive superiority of the Venetians or the Genoese in the arts of gun-founding or of the navigational and ship-building skills of the Portuguese who controlled the oceans of the world, including all oceans bordering on Islamic lands, and even the *Hajj* sea routes. But they do not seem to have realized that the navigational skills of the Portuguese were not accidental but had been scientifically developed and sedulously cultivated starting with the research establishment of Sagres set up in 822 AH/1419 AD by Prince Henry the Navigator.

And even while envying and trying to acquire the technologies involved, they failed to understand the basic inter-relation between Science and Technology. As late as 1213 AH/1799 AD, when Selim III did introduce modern studies of algebra, trigonometry, mechanics, ballistics and metallurgy into Turkey, importing French and Swedish teachers, so as to rival the European arts of gunfounding, he failed to place emphasis on basic scientific research in these subjects, so that Turkey never caught up with Europe. And even today, when we have come to recognize that technology is the sustenance and the power, we have not appreciated that there are no short cuts to it; that basic science and its creation must become part of our civilization, as a pre-condition of the mastery of science in application.

How can we turn the pages of history back and excel in science once again? Most of my remarks apply to the developing world in general, but I shall speak with special reference to the situation in Islamic countries.

In keeping with our own experience of earlier centuries, in keeping with the experience of others and in keeping with the obligations laid on us by the Holy Book and the Prophet, our society as a whole, and our youth in particular, must develop a passionate commitment towards bringing about a renaissance of sciences. We must impart hard scientific training to more than half of our manpower; we must pursue pure and applied sciences with 1-2 per cent of GNP being spent on research and development and at least one fifth of this on pure sciences alone.

This was done in Japan with the Meiji revolution and is being undertaken today in a planned manner, for example, by the People's Republic of China—the far Cathay of the Holy Prophet's *Hadith*—with defined targets, in space sciences, in genetics and biotechnology, in microelectronics, in high energy physics, in agriculture, in the control of thermo-nuclear energy. There is a clear recognition that all basic science is relevant science; that the frontier of today is tomorrow's application and that it is crucial to remain at the frontier. In this context one may ►

recall that the GNP of the Islamic-Arabic nations exceeds that of China, while the human resources are not significantly smaller.

I have spoken of patronage for sciences. One vital aspect of this is the sense of security and continuity which a scientist-scholar must be accorded for his work. Like all humans, a scientist or technologist can only give of his best if he knows he will have security, respect and equality of opportunity for his work and advancement, and is shielded from all forms of discrimination.

I have referred to a Commonwealth of Science for the Islamic and the Arab countries. Such a Commonwealth of Science was a true reality in the great days of Islamic Science, when Central Asians like Ibn Sina and al-Biruni would naturally write in Arabic, or their contemporary and my brother in physics, Ibn al Haytham, could migrate from his native Basra in the dominions of the Abbasid Caliph to the court of his rival, the Fatimid Caliph al-Hakim, sure of receiving respect and homage, notwithstanding the political and sectarian differences which were no less acute then than they are now.

This Commonwealth of Science needs conscious articulation, and recognition once again, both spiritually and physically, by us the scientists, as well as our countries. Today we, the scientists from the Islamic countries, constitute a very small community—one hundredth to one tenth in size, in scientific resources, and in scientific creativity compared to the international norms. We need to band together, to pool our scientific resources. We need the articulation of a compact conferring immunity, for, say, the next twenty-five years, during which those within this Commonwealth of Sciences, this *Ummat-ul-Ilm* would not be discriminated against on national or other grounds.

And finally, there is the isolation of our scientific effort from international science. It is not just the physical isolation of the individual scientist from his scientific peers elsewhere that we suffer from. There is also the isolation from the norms of international science, the gulf between the way we run the scientific enterprise in our countries and the self-governing manner in which it is run in the developed countries.

The renaissance of Sciences within an Islamic Commonwealth of Sciences is contingent therefore upon five cardinal preconditions: passionate commitment, generous patronage, provision of security, absence of sectarian or national discrimination, self-governance and internationalization of our scientific enterprise.

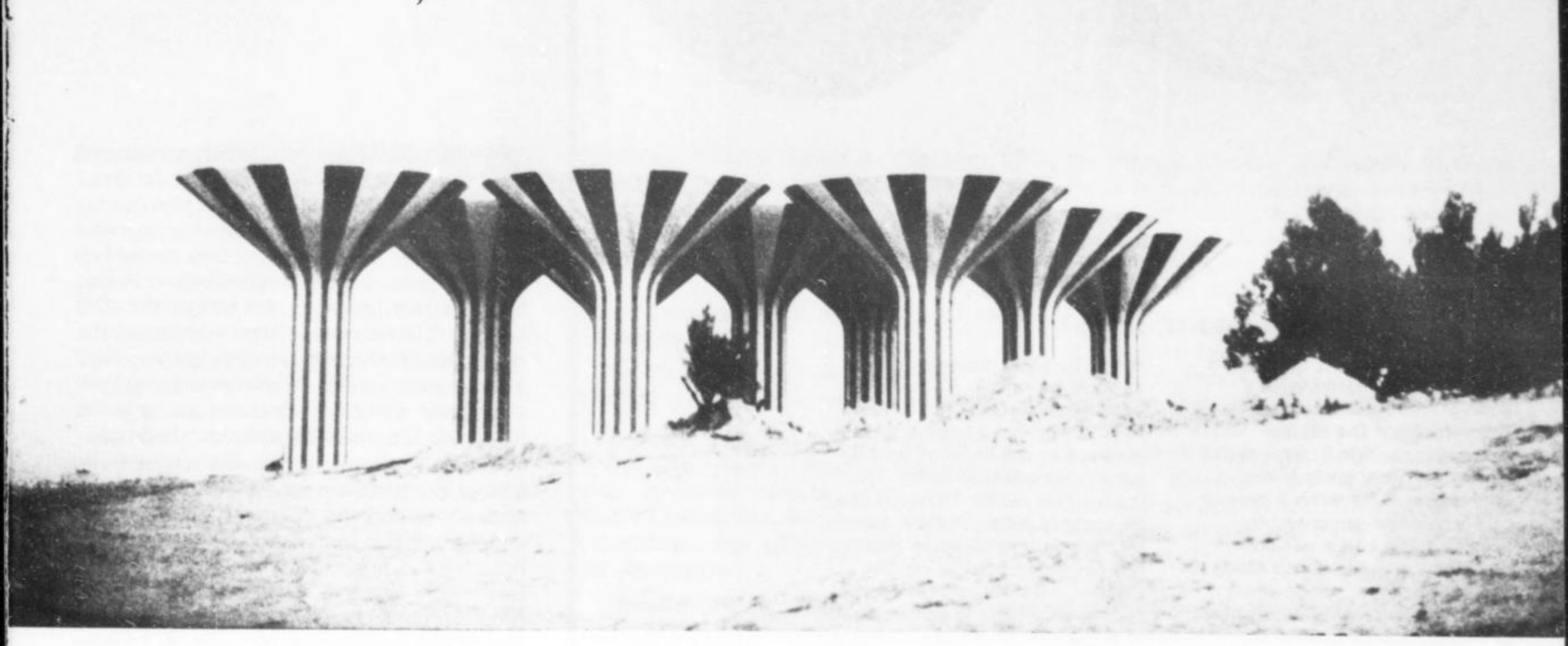
Why am I so passionately advocating our engaging in this enterprise of creating knowledge? This is not just because Allah has endowed us with the urge to know, this is not just because in the conditions of today knowledge is power and science in application the major instrument of material progress; it is also that as members of the international world community, one feels that lash of contempt for us—unspoken, but still there—of those who create knowledge.

My self-respect suffers a terrible hurt whenever I enter a hospital and find that almost every potent life-saving medicament of today, from penicillin to interferon has been created without a share of inputs from any of us from Arab and Islamic lands, or indeed from any in the Third World.

To turn from science to technology, the Holy Book of Islam places equal emphasis on *Taskheer* (Technology) as on *Taffaqur* (Science); it emphasizes acquiring mastery of Nature, through scientific knowledge, as much as the creation of new knowledge.

Besides lacking a base in Sciences, what are the present obstacles in our societies to our acquiring the highest proficiency in technology? After all, never before in human history has so much effort and such magnitude of funds gone into creating technical facilities in such a short duration of time as in our lands during the last decade. Unfortunately, most of these projects have been executed in the turnkey mode; their execution has had little association with and little employment of the incipient research and development community of our men of technology and engineering. Our societies have become consumers of technology, not technology-minded.

At least in part this is due to the fact that the decision-maker is, as a rule, a non-technical person. Our countries are the paradise of the planner, the administrator; the technologist has had no part in decision making. And yet experience shows that the long term goal of technology acquisition depends on complete accord, participation and involvement between the scientist, the technologist, and those who run the development machinery of State—with full



Photos © Aga Khan Award for Architecture, Geneva

A daring challenge to the usual architectural drabness of utility buildings, these striking water towers stand out on the skyline of the city of Kuwait, a symbol of the search for new ways of assimilating modern technology into existing traditions. Supplied by two seawater distillation plants, a total of thirty-one of the mushroom-design towers ensure a constant supply of fresh water to the growing city. Opposite page, these three towers, situated prominently on Kuwait Bay, offer a contrasting design. The main tower is a 185-metre concrete column supporting two spheres which contain, in addition to a reservoir, a restaurant, a banquet hall, an indoor garden and an observatory. A second tower supports a single spherical reservoir. The third structure, a concrete needle, completes the composition.

trust in each other's sphere of work. And the same rule applies, besides industrial and science-based technology, to the whole area of science in application, in agriculture, in public health, in energy systems, and in defence.

I wish to conclude with three appeals. First, to my brothers in Sciences: We, the scientists, have rights, as well as obligations. We are few in numbers, the sizes of our communities are individually sub-critical. This, however, would not be so if we were to band together in an *Ummat-ul-Ilm* (a Community of Sciences). The building up of such a Commonwealth of Science depends, in the last analysis, on us.

I have personally been engaged in a quest for a unity among the seemingly disparate fundamental forces of nature. This is part of our faith as physicists and of mine as a Muslim, in the ultimate unity and symmetry of Nature. At the Nobel Banquet in 1979 I had the privilege to remind the audience of this:

"The creation of physics is the shared heritage of all mankind. East and West, North and South have equally participated in it. In the Holy Book of Islam, Allah says :

'Thou seest not, in the creation of the All-Merciful any imperfection, Return thy gaze, seest thou any flaw, Then return thy gaze, again and again. Thy gaze comes back to thee dazzled, aweary'. (LXVII: 3,4).

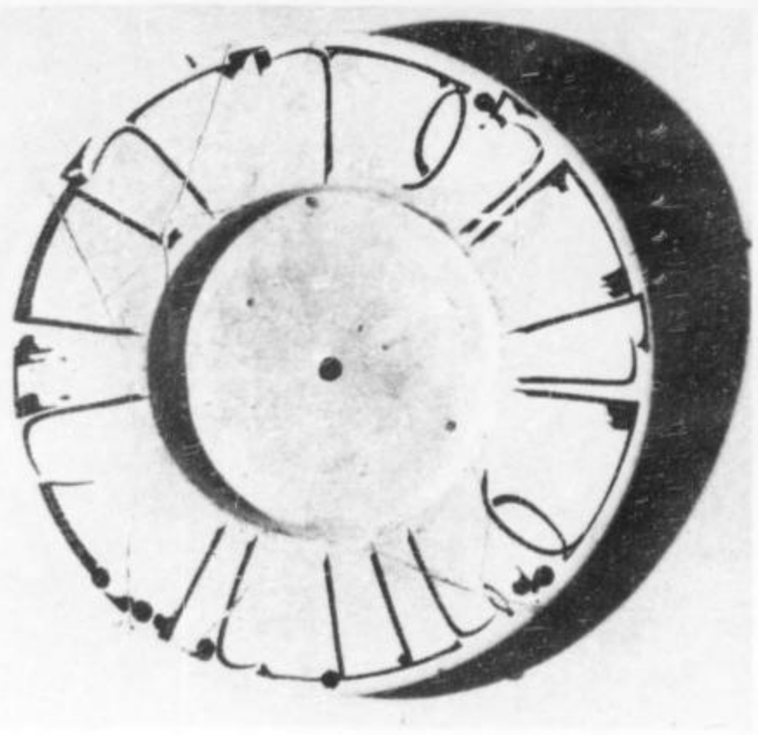
"This, in effect, is the faith of all physicists, the faith which fires and sustains us; the deeper we seek, the more is our wonder excited, the more is the dazzlement for our gaze."

Following this sentiment, my second appeal is to those among us who are shaping our societies through their teachings; do not forget these words from the Holy Book, nor what their implications are for the goals of our society. Let me humbly suggest that one implication of this is that seminaries in Islamic lands must include in their curricula studies of the concepts of modern sciences and not just sciences as at the time of Ibn Sina (Avicenna).

And finally, my third appeal is to those responsible for our affairs. Science is important because of the underlying understanding it provides of the world around us and of Allah's design; it is important because of the material benefits its discoveries can give us. We, in Islam, owe a debt to international science, which in all self-respect, we must discharge. However, the scientific enterprise cannot flourish without the generous patronage of our rulers, just as in the past enturies of Islam. The international norms of one to two per cent of GNP, would mean expenditures of the order of four to eight billion dollars annually for the Islamic world on research and development, one fifth of this spent on pure science. We desperately need such funds.

We need science foundations in our countries, run by the scientists. We need international centres of higher learning within and without our universities, providing liberal support, security and continuity. Let no future historian record that in the fifteenth century of the *Hijra* the scientists were there but there was a dearth of "princes and ministers" with their generous patronage.

■ **Abdus Salam**



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The sacred language of script

Calligraphy, the art of elegant writing, was vested with a sacred character because it was the vehicle of the divine message, revealed to mankind in Arabic. Very early in the Islamic era it became a branch of knowledge governed by precise rules and a widely practised art which still holds an honoured place beside that of modern typography. Examples of calligraphy, destined for religious, official or private purposes, are found in all Islamic countries not only on parchment and paper but in many cases on utensils, in art, and woven into the fabric of architecture. Calligraphy was blended into ornate designs and angular geometric lettering could be used alone as a decorative motif. Above left ceramic dish (Iran, IV-V/10th-11th centuries) adorned with a proverb in the style of writing known as knotted kufic. The inscription reads: "Knowledge, its taste is bitter at first, but ultimately it is sweeter than honey. Good health! (to the owner)." Below, divine words encrusted in the enamelled tiles of a cupola on the great mosque of Yazd, Iran (built 776 AH/1357 AD). Above right brass hand-warmer inlaid with silver (Syria, X/16th century). The wide band of braided strapwork on each hemisphere resembles a highly ornate kufic inscription.

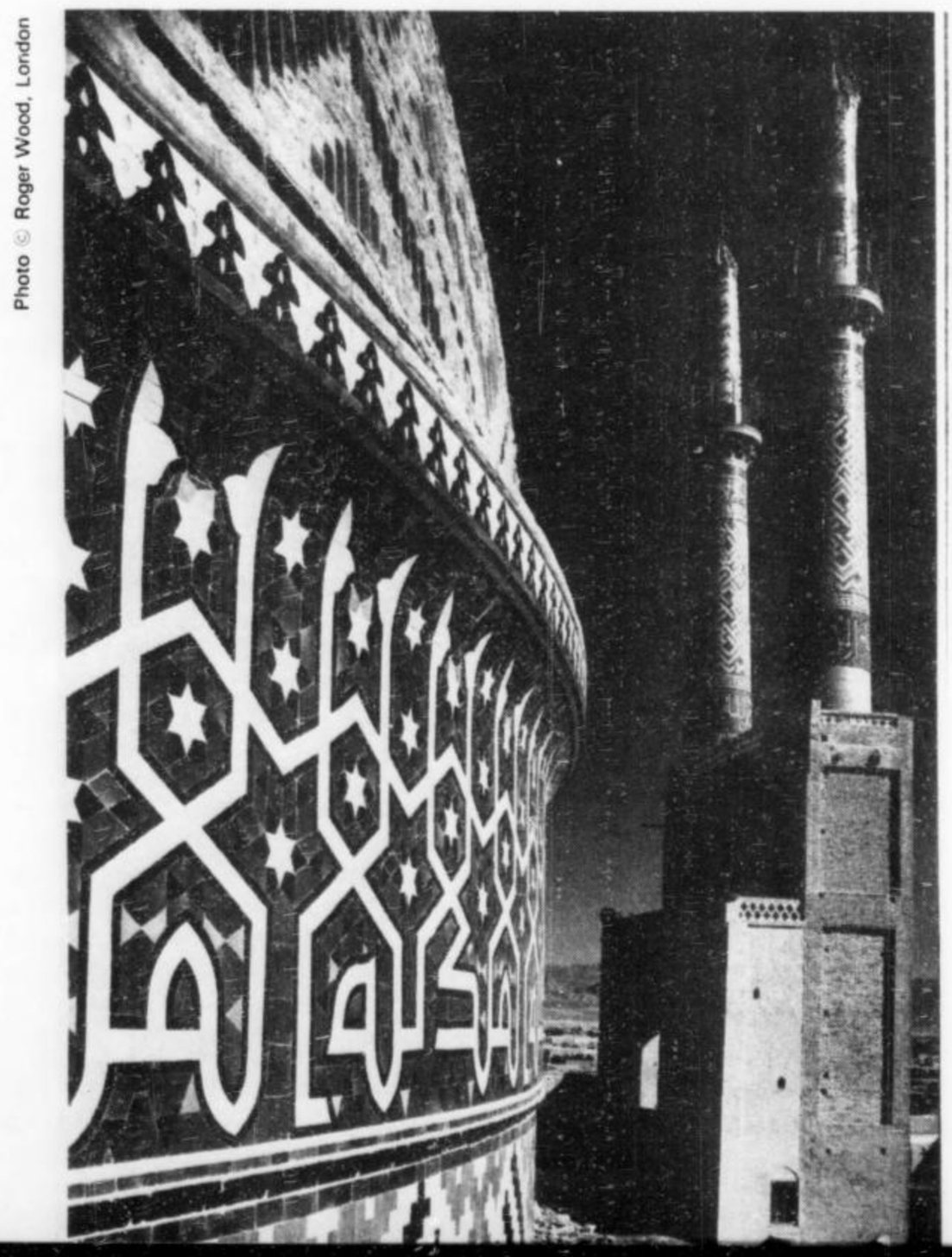

Photo © Roger Wood, London

MUSLIM thought, which contributed so greatly in the past to the development of universal philosophy, is undergoing today a profound reappraisal which carries the promise of new dynamism and creativity. Unlike its counterpart during the reformist period at the end of the 19th century, contemporary Islamic philosophy is not so much concerned with adapting itself to the modern world as with examining contemporary civilization critically and playing its part in the universal attempt at revival.

Islam's recognition of earlier religions, its almost complete acceptance of all scientific knowledge and the interest it shows in the various eastern and western cultures are proof of the open-mindedness and spirit of synthesis which characterize Muslim thought. It was because of this attitude that one of the great problems faced by Muslim civilization in the past was how to find the right balance between adaptation to human evolution and revolution on the one hand and, on the other, preserving the essentials of its own philosophy and its own intellectual and practical achievements.

The task was made more difficult by the fact that from the start and at the doctrinal level Islam adopted a unitarian stance, opposing all separation between theological and social, spiritual and secular. Given such an approach, it was impossible for Islamic thought, whether scientific, philosophical or of any other kind, to adopt a neutral or transcendental attitude towards human life or the life of human societies. Any intellectual innovation, therefore, had either to be adapted or rejected.

In the context of a public opinion anxious to preserve its identity and traditions many intellectuals have been drawn towards either rigid conservatism or radical reformism. Thus the universalism of Ibn Sina (Avicenna), who adapted science and philosophy to Muslim theology, was counterbalanced by the essentially Islamic spirituality of al-Ghazali, while the reformism of Ibn Taymiyya, who rejected any form of adaptation, reflected the desire of the people and the community to maintain a purified form of Islam freed from the encroachments of medieval cosmopolitanism.

Of course the main movements of Muslim philosophy during the Middle Ages never went beyond a not very dynamic alternation

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ABDEL MAJID MEZIANE *is Rector of the University of Algiers, where he has taught since 1965. He is the author of several publications (in French and Arabic) on the sociology of culture and of many studies (in Arabic) on philosophical questions.*

The dynamic of Islamic thought

by Abdel Majid Meziane

between synthesis and adaptation—though for the period this represented a fairly satisfying view of the world. But despite the vigour and realism of the socio-political attitudes to which it gave rise, the tendency towards radicalism produced serious intellectual difficulties. In the absence of a religious philosophy strong enough to hold its own against the Hellenistic, and particularly the Aristotelian, heritage, Muslim thought sought authenticity by developing such disciplines as post-Mu'tazali theology, spirituality and the legai and linguistic sciences, each with its own specific field and methodology.

By the end of the VI/12th century, the idea of a comprehensive world universality had given way to that of an exclusively Muslim universality and this regression in self-development was in itself indicative of a slackening of creative energy. Not only did theology no longer use philosophy as it had been able to do during its early days of greatness, but from the VIII/14th century onwards it ignored philosophy completely. Parallel but compartmentalized development of the different branches of knowledge, with "sacred" and "profane" rarely brought together, gave rise to a traumatic situation in which the "spirit of theology" was outstripped by the attainments of science and often had difficulty in adapting itself to the situation.

This problem of course was not peculiar to Islamic culture; from the Renaissance onwards the "theological outlook" in the Christian West was also outstripped and, ever since then, religious disciplines have constantly lost ground. But for the Muslim community the problem has to be seen and examined in different terms. The political decline of Islam, accentuated by the inroads made by external ideologies, revived susceptibilities dormant since the great confrontation of the Crusades and aggravated by the fact that the worldwide intellectual revival was led by the Western world, with its traditional hostility to Islam. In Islam, the centuries of decadence were above all a period of cultural survival in which little attention was paid to philosophical debate and scientific achievement. Some of the reform movements chose the easy path of conservatism and "fundamentalism", not so much because they were incapable of accepting cultural progress as because it was a means of self-defence and of preserving Islam's identity.

Neither the philosophy of "adaptation" nor conservative and "protectionist" theology enabled religious thought to develop its true potential. Today, however, a new Muslim humanism is developing along two fundamental lines of thought. This could provide an intellectual dimension lacking in the cold reasoning of science and our increasingly reckless "Promethean" philosophy.

The first approach is concerned with developing a system of ethics for science.

For Islam, both the end and the foundation of any science must be a system of ethics providing rules by which man may avoid all excess and deviation. The sole virtue of the "man who knows" is that he "serves mankind".

Scientific ethics therefore are not a separate code specially drawn up for the use of scientists. For the scientist, far more than the layman, must be conscious of his responsibilities, which, from time immemorial and for the whole of mankind, proceed from an existential covenant between him and the Creator, the created universe and all his human brothers. Seen in this context, human progress is part of a general scheme of things in which morals and spirituality form a bulwark against the vagaries of science, capable of destroying nature and of leading to the domination of man by man.

For dynamic Muslim thought, the task of a moral philosophy of knowledge is not to adapt itself to science or to indulge in random criticism of the scientific spirit, but rather to shed light on scientific thought in such a way as to humanize and give it back the spirituality it lost when it was annexed by political and economic forces.

The second line of thought that I would like to describe here briefly is a social philosophy which aims at being "revolutionary", not only in the form of protest, but also in a constructive and co-operative sense, with the object of rebuilding our civilization and correcting some of its errors.

Religious philosophies—and Muslim philosophy is no exception—have often been accused of abandoning their original goal of freeing man from all forms of despotism whether intellectual or political. In the Qur'anic texts, the monotheistic religions represent history in terms of broad periods and outstanding liberators: Abraham struggling against the tyranny of Ur, Moses against Pharaoh's pride, Jesus against the domination of the priests, and Islam against imperialism oppressing small nations. Such symbols are easily grasped by the popular memory and readily motivate moral and political behaviour, but they must be updated constantly and given new life by a social philosophy sensitive to current events and highly critical of those political systems that recall ancient tyrannies.

The first responsibility of any community is "to work for the triumph of good" and "the prevention of evil". Of course, this fundamental principle of Islamic moral and social philosophy has often been misapplied. Under the dynastic and oligarchic systems deriving from man's so-called primitive political nature, there were those, particularly among the "tame" intellectuals, who either participated in the establishment as men of law or, as philosophers, justified the government's misdeeds in the same way that Aristotle justified Alexander's imperialism. It is too often forgotten that in the early days of Islam there were guardians of religious doctrine who exercised an active and vigilant political responsibility and were prepared to oppose all despotism at the risk of their own interests and even their life.

But while it is critical of its own history and of its own political mistakes, Islam's social philosophy does not hesitate to criticize new forms of imperialism. A truly universal democracy, to be created through the common efforts of all mankind, can derive much benefit from a philosophy which, through the ages, has been sensitive to the aspirations and struggles of the many and varied peoples living in the Islamic world and continuing to draw inspiration from its ideals of justice and equality.

By instituting and advocating a system based on economics, contemporary establishments have increased alienation and thrown up more and more oppressive governments. Every principle of Islam's socio-economic ethic condemns intemperate behaviour, whether individual or collective, just as it condemns those non-collective interests that generate conflict between nations.

Countries possessing economic power and by the same token all other power, be it military, political or technological, increase this power at the expense of small, impoverished peoples who are kept in a constant state of inferiority. This division of mankind, of course, is not a new phenomenon. It is the legacy of ancient imperialisms whose rich capitals were built with the blood and sweat of the masses.

Such injustice and inequality are condemned by all monotheistic religions in their economic ethics. But the vigour with which ►

Islam preaches egalitarianism has never been equalled.

The historic liberation struggle of small nations against the great powers is today reactivated by a new revolutionary Islamic philosophy that seeks to defeat all forms of exploitation generating hatred between nations and to abolish all the discrepancies which divide mankind in two.

The basic principles of Islam which break down all racial, national, economic and cultural barriers, are still sufficiently alive today to bring hope to the masses in many countries of the Third World. A world where there is no discrimination between educated and illiterate, between the "people of the Book" and the "Gentiles" and between rich and poor, remains, according to the basic texts of Islam, a universal aspiration which is no mere Utopia.

Islam does not set itself up as the only model of a universal community, for in principle and in practice it is a "multi-communal" society. But, despite national and cultural diversity and differing political systems, mankind is basically one both in its anthropological origins and final ends. In a world where the difficulty of co-existence is the source of major problems, the social philosophy of Islam can assert its originality and creativity by stressing mankind's basic unity within its diversity.

Recognition of each socio-cultural unit without hierarchical distinction is the starting point of a new anthropology in which separate communities will ultimately merge into one. For Islam, universality can never be a weakening factor since the whole of mankind and each human being taken individually have the same existential value and each recognizes the other. The Qur'an declares that earthly corruption or the unjustified taking of human life is tantamount to murdering the whole of mankind, while restoring one man's life is the same as resuscitating all humanity.

■ **Abdel Majid Meziane**

Colour pages

Opposite

Persian art enjoyed a golden age under the Safavid dynasty which was founded in 920 AH/1514 AD by Shah Ismail and ruled Persia until the XII/18th century. The royal mosque (Masjid-i Shah) at Ispahan, Iran, was built in the XI/17th century as part of an immense urban development programme which saw the construction of religious edifices, palaces, gardens and hydraulic installations. The mosque is famed for the brilliant enamelled tiles which adorn its minarets, the walls around the courtyard, its inner walls and cupolas. Photo was taken beneath the cupola of prayer.

Photo Jean Mazenod © Editions d'Art Lucien Mazenod, Paris

Page 60

Above. The conquest of Delhi in 932 AH/1526 AD by Babur (a descendant of Genghis Khan) led to the rise of the Moghuls, perhaps the most brilliant dynasty of Muslim India. The culture of Moghul India was influenced by Persia, whose language it borrowed, while preserving its own originality and producing outstanding achievements in art and literature. The emperor Akbar (X-XI/16th-17th centuries) encouraged the development of an original architectural style marked by the affinities between Muslim and Hindu art. Photo shows the delicate tracery of openwork marble windows in the mausoleum of Itimur al-Dawla, minister of Shah Jahangir (XI/17th century) at Agra, India. All the surfaces of the mausoleum are covered with marble panels carved with openwork floral and geometric designs.

Photo © Henri Stierlin, Geneva

At the death of the Sultan Suleiman the Magnificent (X/16th century) the Ottoman Empire encompassed Turkey, the Balkans as far as the Danube, and the whole of the Arab world with the exception of Morocco. Under the influence of the Sultans, Islamic culture flourished in every field. The arts of the book were highly esteemed by the court and calligraphers displayed extraordinary inventiveness. Below, calligraphy of Hasan Ahmad Qara Hasari (X/16th century). The text is a variant of the formula "Praise be to God".

Photo Roland and Sabrina Michaud © Rapho, Paris

Page 61

The city of Fez (Morocco) was founded in the II/8th century by the Idrisid rulers and became under the Almoravid dynasty one of the foremost centres of Islam in the West. Later the Marinids (VI-IX/12th-15th centuries) chose Fez for their capital and built magnificent *madrasahs* (schools) and other monuments. Photo shows detail of a wall in the prayer room of the most remarkable of these madrasahs, the Madrasat al-Attarin, an example of the Hispano-Moorish style at its finest. Every inch of the walls, lined with enamelled tiles and onyx, is covered with ornamental motifs. The architecture of the Medina (old city) of Fez, as well as its natural environment and the traditional activities flourishing there are today endangered. Unesco has launched an appeal to international solidarity for the safeguard of the old city, and several projects are now being studied for the preservation and development of a site which was one of the jewels of Islamic culture.

Photo Maximilien Bruggmann © La Spirale, Lausanne

Islamic Culture and the Modern World

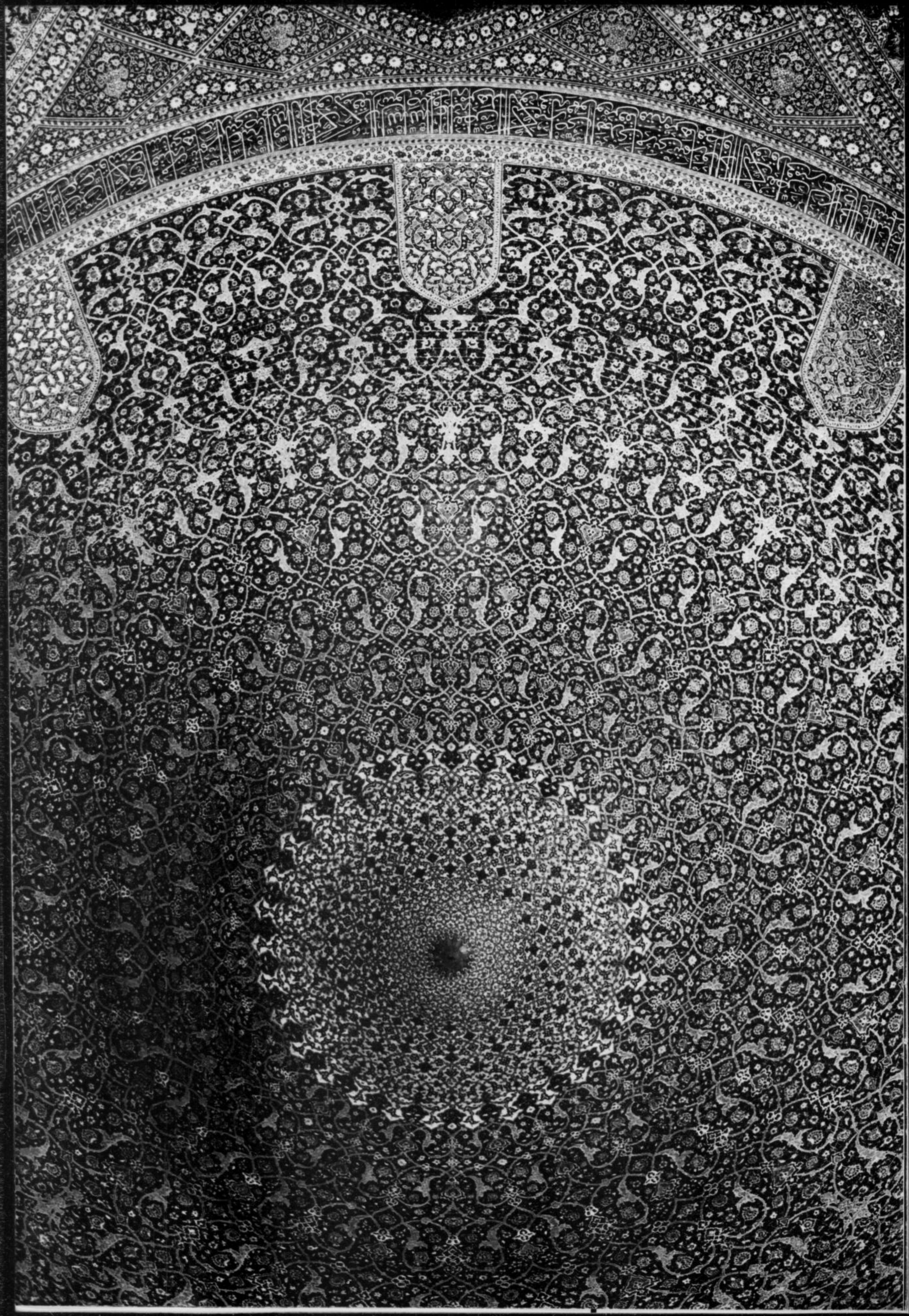
"Islam's determination to maintain its authenticity is in no way incompatible with its sincere desire to collaborate with other religions and doctrines whenever such collaboration is for the benefit and well-being of humanity. As the Prophet (Peace be upon Him) said: 'All creatures form part of the family of God and the most beloved of God is he who best serves His family.' Indeed, it is this very determination to maintain its authenticity which enhances Islam's capacity to enrich humanity in those areas where civilizations meet and interact.

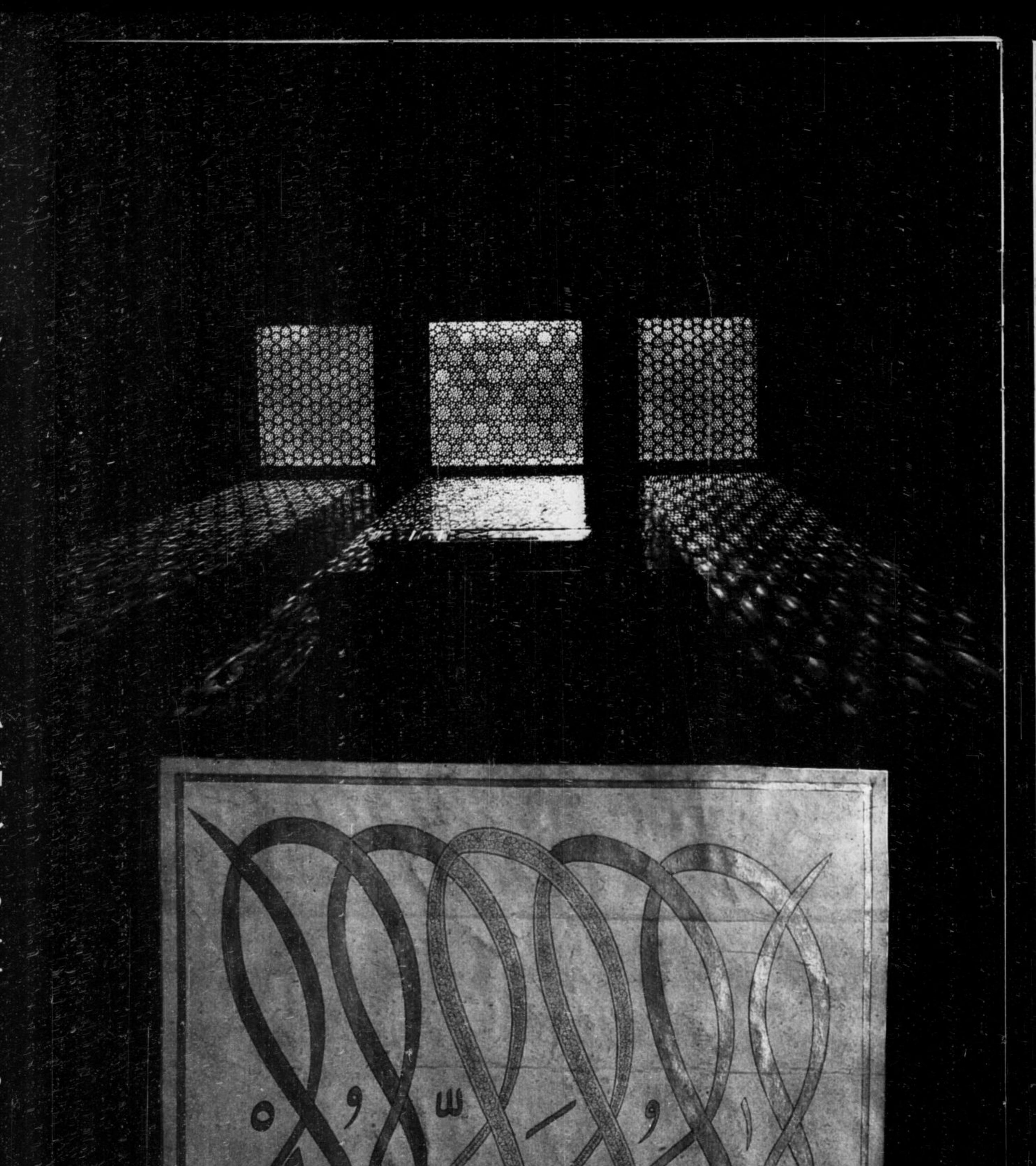
"Today, we are more aware of the encounter between cultures than we were in the past, when each great civilization believed itself to be the custodian of the highest values and to be the only one worthy to expand and dominate the world. Nowadays men have come to appreciate the diversity of cultures, their interactions and the enrichment born of mutual exchange. [...]

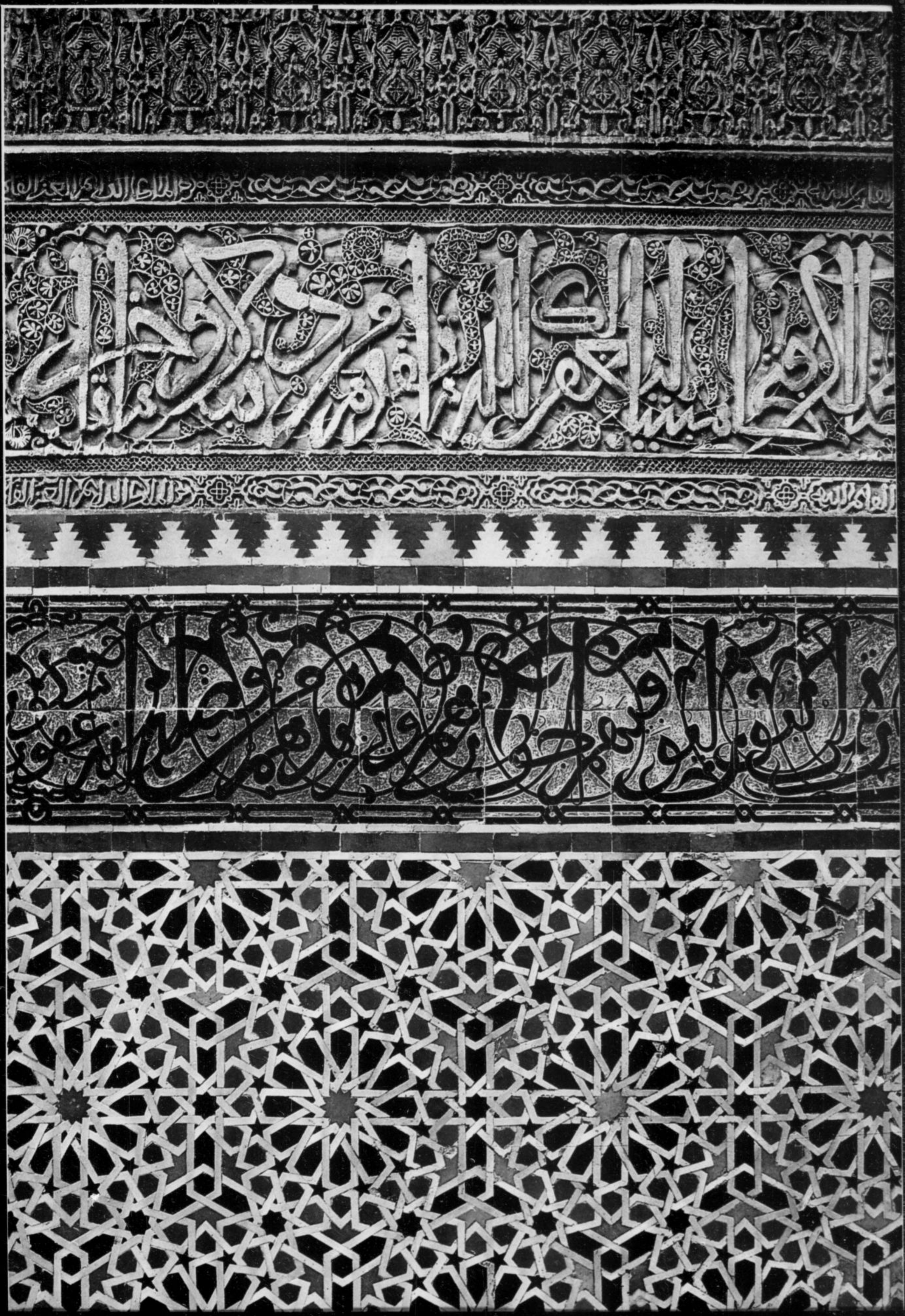
"Islam today has a duty to make its culture known and to participate in the dialogue and interchange between civilizations. But more than this, the modern world demands of this culture that it provide solutions to the major world problems and the means to escape from current ideological and economic crises."

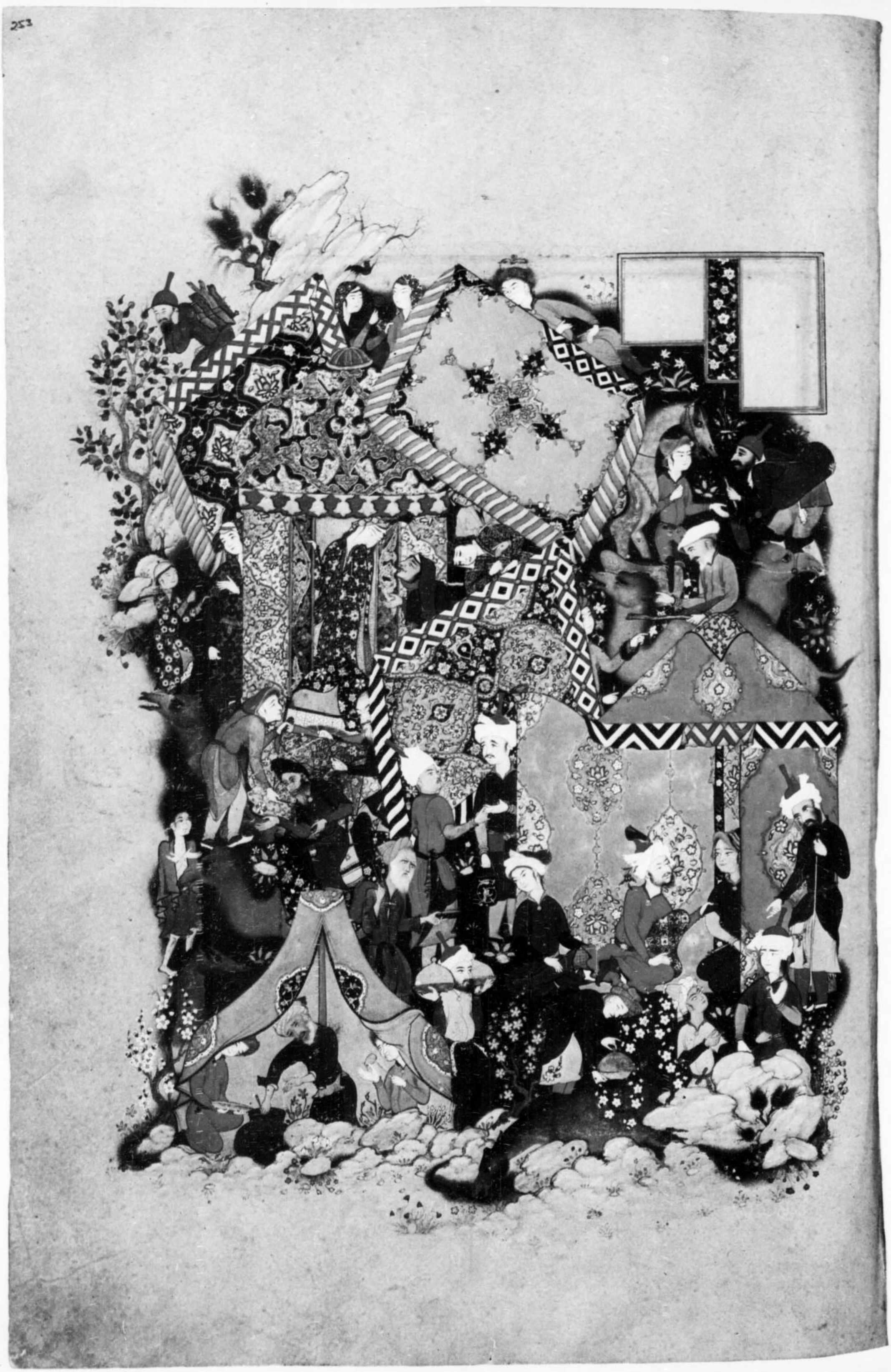
Extract from a speech made by the Secretary-General of the World Muslim League, Sheikh Mohammed Ali Al-Harakane, at an international conference on Islam held at Unesco in Paris in December 1980.

The World Muslim League is an international, non-governmental organization with headquarters in Mecca and branches in Africa, Europe, Asia and America. The objectives of the League are to serve and defend the Islamic religion, to instruct Muslims and to bring together Islamic communities. At present the League provides the secretariat for the annual meeting of Ministers of Islamic Affairs, for the International Council of Mosques, and for the Supreme Committee for Islamic Information. Its Constituent Committee, on which 54 Islamic countries are represented, meets annually to review the League's activities and plans for the future.









The eye of the heart

by Rahmatullah

ISLAM is not only a religion, a social system and a form of culture. It is also a deep mystical tradition that has developed over the last fourteen centuries.

Muslim gnoseology distinguishes four forms of knowledge accessible to man which, according to the VII/13th century Persian Shi'ite philosopher Nasir ad-Din at-Tusi, are symbolized by four liquids. The first is sensory perception of the phenomenal world acquired through the five senses of the body and the reasoning faculty of the mind; this is what we call science. It is symbolized by water, which is a clear liquid and easy to assimilate.

The second is intuitive knowledge acquired through the mind's imaginative faculty; this is the realm of art, literature and philosophy in the usual sense of the word, i.e. speculative thought. It is symbolized by milk, which is a more nourishing drink.

The third form of knowledge is the objective study of the supra-sensory experience of prophets and mystics and of their teaching; this is philosophy in the etymological sense of the word, i.e. love for divine wisdom *(theosophia, hikmat ilahiya)*. It is symbolized by honey, which is even more nourishing, and delicious as well.

The fourth kind of knowledge is direct experience of supra-sensory Reality acquired without the intermediary of the physical or mental faculties through the development of man's potential powers of spiritual perception; it is revelation, divine inspiration or the mystic dream. It is symbolized by wine, which transports the drinker to the depths of himself. It is this celestial knowledge and not the terrestrial alcoholic drink that is celebrated by the famous VI/12th century Persian poet Omar Khayyam in his *Ruba'iyat*.

A century later Umar Ibn-al-Farid, the greatest Arab mystic poet, wrote in his poem *In Praise of Wine :*

We drank to the memory of the Beloved a wine which enraptured us before the vine was created...

He who has lived on this earth without rapture has not really lived, and he who has not died from his rapture is devoid of reason.

For Muslims the supreme example of a mystical experience is that of the Prophet Muhammad on the two great "Nights" celebrated in the Islamic calendar. The first is the *Night of Power*, when Muhammad received the first Qur'anic revelation through the intervention of the angel Gabriel. The second is the *Night of the Ascension*, when the Prophet, transported to the Rock of Jerusalem, had a brief foretaste of the Resurrection.

Thus the Qur'an, the word of God enunciated by the Prophet, and the *Hadith*, or "sayings" of Muhammad handed down by his companions, constitute the main source of mystical meditation in Islam. Particular attention is given to those verses of the Qur'an which are of a symbolic nature; the Book itself encourages this: "Allah gives parables to men so that they may take heed". (XIV: 25).

Among the Prophet's *Hadith* are some in which God speaks in the first person. Because of this they are called *qodsi* (holy). One of the most frequently quoted says: "I was a hidden Treasure, and I wished to be known; so I created the world". These inspired words have been the object of special study by lovers of wisdom.

Mystical meditation also draws from the almost inexhaustible corpus of writing and sayings by Muslim mystics which has grown up in all parts of the Islamic world. Some of them were prolific writers and produced monumental works. This was the case of Muhy'iddin Ibn al-Arabi (born in Andalusia, died in Damascus in 637 AH/1240 AD). Shortly before his death he drew up a list of his 270 works, the longest of which, *Meccan Revelations,* comprises 560 chapters.

The *Mathnawi* of Jalal al-Din Rumi (born in Balkh, died in Konya in 672 AH/1273 AD) is a 45,000-line epic poem of profound wisdom and striking beauty. Rumi was the founder of the Mawlawi Sufi Order, better known in the West as the whirling dervishes. Two great Persian mystics, Farid al-Din 'Attar (VII/13th century) and Jami (IX/15th century) compiled biographical ➤

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The Safavid era in Persia was the golden age of the miniature, largely due to the encouragement of Shah Tahmasp (930-984 AH/1524-1576 AD), a gifted amateur who brought together the most talented artists in the land in a studio attached to his court. Apart from drawing and painting the artists also learned how to make their own paints and brushes. This miniature, attributed to the famous painter Sheikh Muhammad, is from a manuscript of *Haft awrang* (The Seven Thrones) by the poet Jami who died at the end of the IX/15th century. It illustrates a scene from the popular love story of Layla and Majnun in which the poet Qays (known as *al-Majnun,* "the madman") falls in love with Layla, the daughter of a powerful sheikh. Majnun, above right, is casting an affectionate eye on his beloved who is standing at the entrance to the tent.

Photo © Freer Gallery of Art,
Smithsonian Institution, Washington DC

Photos Roland and Sabrina Michaud © Rapho, Paris

Sufi (Islamic mystic) calligraphers have often practised a kind of "double" mirror writing in which the right side of the composition is a reflection of the left. Right, giant calligraphy of the word *Huwa* "Him" (God) in the mausoleum of Rumi, the great Sufi poet in the Persian language, at Konya (Turkey). This balanced, harmonious mirror calligraphy expresses the Sufi unity with God. Left, portrait of Jalal al-Din Rumi (604-672 AH/1207-1273 AD) also known as Mawlana ("Mevlana", Our Master, in Turkish). The founder of the fraternity of the whirling dervishes, Rumi is considered to be one of the greatest mystic poets of all time. Apart from prose works he wrote the *Divan-e Shams e-Tabrizi* (The Collected Poems of Shams of Tabriz) and a vast poem of some 45,000 verses, the *Masnawi*, a veritable mystical epic which has profoundly influenced Islamic thought.

dictionaries and anthologies of the aphorisms of other Muslim mystics.

But it is mystical poetry that has had the greatest impact on the Muslim masses. At first it was written in Arabic, the religious and cultural language of Islam, but it gradually spread to other languages. Whether they wrote in Persian like Hafiz of Shiraz (VIII/14th century), in Turkish like Yunus Emre (VIII/14th century) or in Urdu like Khwaja Mir Dard (XII/18th century), all described their supra-sensory experience:

Last night, at sunset, I was freed from anguish; and in the darkness of the night, I received the Water of eternity.

(Hafiz).

Now, I can offer my doubts to plunder...
For I have renounced myself,
I have discarded the veil which covered my eyes,
And I have achieved union with the Friend.

(Emre)

Whither, 0 Dard, has my heart cast its glance?
Wherever I look, I see none but Thee.

(Dard)

The Muslim mystics have always had a universal outlook. Husain Ibn Mansur al-Hallaj, the IV/10th century mystic and martyr, sums it up very well when he writes: "I have pondered on the religious denominations, striving hard to understand them, and I consider them as one principle with many branches. Do not ask a man therefore to adopt one denomination rather than another, for that would divert him from the essential principle. It is the principle itself which must seek him out, for through the principle all greatness and all meanings become clear. Then will man understand".

In his *Book Uniting the Two Wisdoms*, the Ismaili philosopher-poet Nasir-i Khusraw, who lived in Persia in the V/11th century, demonstrated the harmony between Greek philosophy and Islamic gnosticism. Similarly, in the XI/17th century, prince Dara Shikoh, son of the Indian emperor Shah Jahan, and himself a mystic, asserted that, apart from a few superficial differences of terminology, Sufism and the Advaita Vedanta (the philosophical system of Brahmanism) were fundamentally the same thing. It has been pointed out that one finds in Sufism tales relating to the Buddha, such as those on which Ibn Sina (Avicenna), the great V/11th century philosopher-physician of Central Asia, based his *Tale of Salman and Absal.*

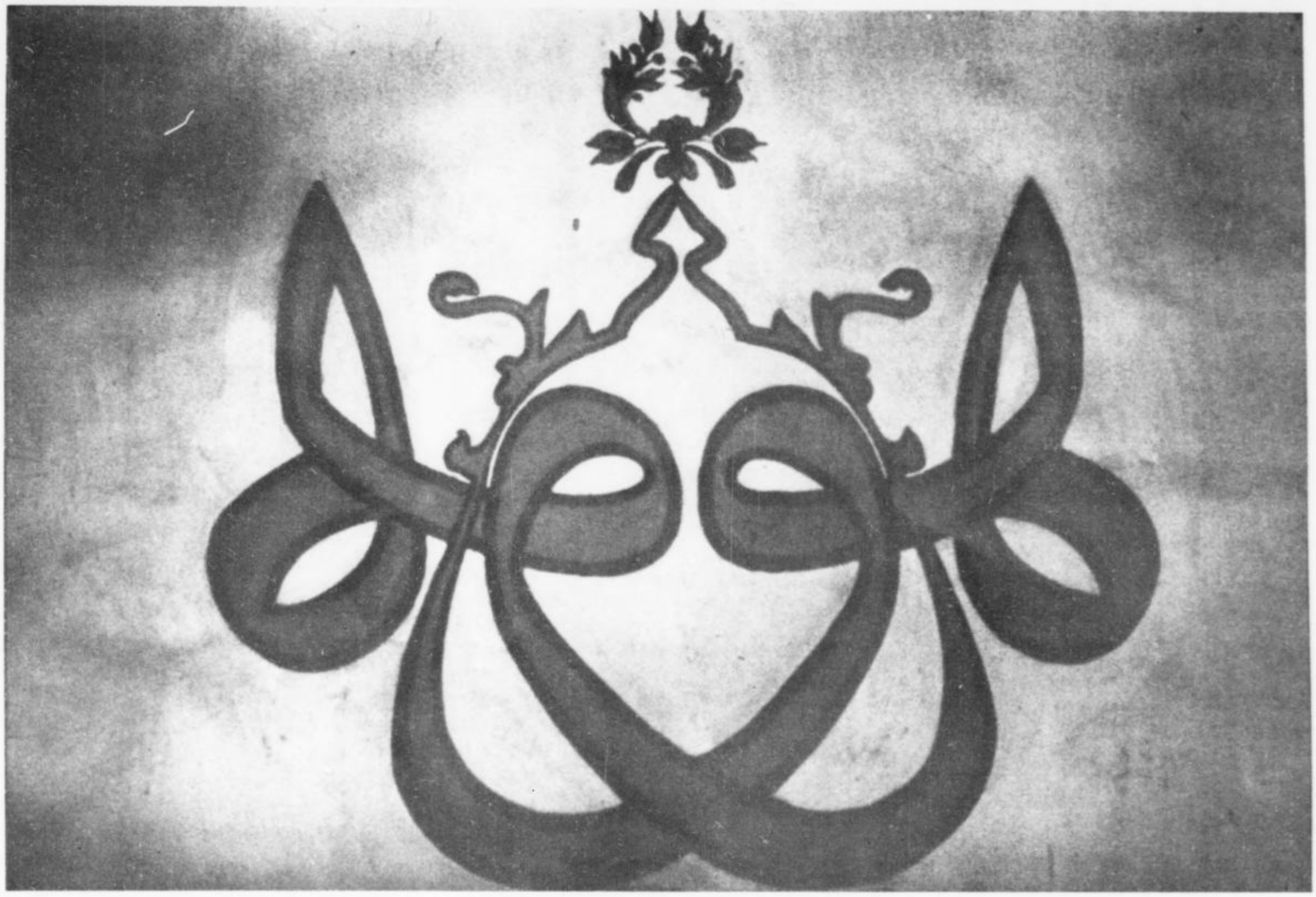
"We created man. We know the promptings of his soul, and are closer to him than the vein of his neck", God says in the Qur'an (L: 16). And one of the Prophet's *Hadith* quoted by the mystics says: "He who knows his soul *(nafs)* knows his Lord". It is through the hidden depths of his being that man can hope to know supra-sensory Reality. But such knowledge cannot be attained through the physical or mental faculties. To recognize this limitation of human nature is to have a presentiment of the supra-sensory world, as Abu Bakr, the first caliph of Islam, puts it: "Praise be to God who gave His creatures only one path to His knowledge: their inability to know Him". And the III/9th century Egyptian mystic Dhu n-Nun-al-Misri said: "He knows God best who thinks he knows Him least".

Knowledge of supra-sensory Reality can be attained only through the development of a faculty of spiritual perception called the Eye of the Heart. But this is a grace from God and cannot be acquired through the will of man. "I saw my Lord with the Eye of my Lord", says the Prophet. And 'Attar explains: "You must know God through God Himself, not through yourself. He, not human wisdom, shows the path that leads to Him."

The Heart *(qalb)* or spiritual Soul is an ontological state or level of being between human nature *(nasut)* and divine nature *(lahut)*. It is the rampart *(barzakh)* separating the two seas mentioned in the Qur'an (XXV: 53). It is the interworld, the celestial Earth between the terrestrial earth and Heaven. It is the angelical world *('alam al-malakut)* of the angel Gabriel. It is the spiritual centre, symbolized by the Ka'ba at Mecca and by the Rock of Jerusalem, towards which the aspiring mystic travels in order to accomplish his esoteric pilgrimage, the Great Pilgrimage. It is the Active Imagination or Intellect contemplating the intelligible world. It is the Throne of God. One of the Prophet's *Hadith qodsi* quoted by the mystics says: "My earth cannot contain Me, nor can My heavens, but the Heart of My faithful servant can contain Me".

The Heart or the spiritual Soul only reflects its own Soul which is the Holy Spirit *(ruh al-qods)* or Soul of the Soul. "The Soul is concealed in the body, and Thou art concealed in the Soul," says 'Attar. "O Soul of the Soul, Thou art greater than everything and before everything. All is seen through Thee, and Thou art seen in all things".

The Holy Spirit is the Face of the Lord mentioned in the Qur'an (LV: 27), the Beloved of the mystics, and the Active Intelligence of the philosophers. It is the divine Nature *(lahut)* which conceals the divine Essence *(hahut)* or divine Abyss.



Ibn 'Arabi described his mystical dream in these words; "Active Imagination achieved in me such strength that it showed me my mystical Beloved in a corporeal, objective, extra-mental form, as the angel Gabriel appeared corporeally to the Prophet. At first I did not have the strength to gaze upon this Form. It spoke to me; I would listen and understand... I never ceased to gaze upon this Form whether I was standing or seated, moving or at rest".

I saw my Lord with the Eye of the Heart, says Hallaj. "I asked: Who art Thou? and He answered: Thou." For to the mystic only God really exists; any existence outside of Him is as unreal as an image in a mirror. Amadou Hampaté Bâ, a disciple of Tyerno Bokar Salif Tal, a Muslim mystic of negro Africa, has expressed this very well: "Basically, there is only one existence: that of God, one letter: *alif* (the first letter of the Arabic alphabet); one number: 'one'. ". Between microcosm and Macrocosm there is therefore a fundamental unity of being *(wahdat al-wojud)* like the identity of substance between a drop of water and the ocean, as Omar Khayyam explained:

The drop of water began to weep, because it had been separated from the Ocean.
The Ocean began to laugh, saying: "It is we who are all;
Verily, there is no other God outside ourselves;
And all that separates us is a single, almost invisible speck".

But the microcosm cannot claim to be the Macrocosm, any more than a drop of water can claim to be the Ocean. Concern for maintaining the absolute transcendence of God, together with a fear of descent into pantheism, gave rise to the hostility of the exoteric authorities against the Muslim mystics. Because he had exclaimed while in ecstasy, "I am the real Truth *(haqq)*", Hallaj was beheaded in Baghdad in 309 AH/ 922 AD. Five centuries later, in distant Java, another Muslim mystic, Sjech Siti Djenar, was to be executed for a similar pronouncement made in a state of ecstasy.

It was the famous V/11th century theologian Abu Hamid al-Ghazali who restored mysticism to the mainstream of Islam. He relates in his autobiographical treatise how, after a spiritual crisis during which he doubted the truth of religion, he realized that mysticism was the best antidote against scepticism and constituted the loftiest aspect of religion. In his most famous work, *Vivification of the Religious Sciences*, he reminds the community of the mystical tendency which had marked Islam in the time of the Prophet and his companions.

In the VI/12th century, Abd al-Qadir al-Jilani, a hanbalite jurist who became a Sufi, established the Qadiriyya religious brotherhood which developed rapidly and became the most important Sufi Order.

The development of the faculty of spiritual perception is an act of God, not of man, but man nevertheless can hasten this event, as the Prophet explains in one of his best known *Hadith qodsi*: Nothing that brings my servant close to Me is more acceptable to Me than the fulfilment of the duties I have prescribed for him. In addition, My worshipper constantly draws nearer to Me through supplementary acts of devotion until I love him. And, when I love him, I am the hearing with which he hears, the sight with which he sees, the hand with which he strikes, the foot on which he walks".

Speaking of the Heart, Rumi asks: "Do you know why your mirror reflects nothing? It is because it has not been cleansed of rust. If it had been rid of all rust and all defilement, it would reflect the light of God's sun... He who recognizes and confesses his faults moves swiftly towards perfection. But he who considers himself perfect does not move towards the Omnipotent. No sickness can ravage your soul worse than imagining yourself perfect".

The Prophet said: "For each thing there is a solvent that removes rust; and the solvent of the Heart is the invocation of God." And the Qur'an says: "Pray to your Lord with humility and in secret" (VII: 55). This is the esoteric prayer, the Great Prayer. Sultan Muhammad Aga Khan, Imam of the Ismaili Shi'ites, develops this in the following way: "It is said in the Qur'an that we live, act and exist in God. This concept is often expressed in the Holy Book in terms that are both strong and poetic. When the deep meaning of these words becomes clear to us, we are ready to receive the gift of revelation".

"He who knows God, loves Him; and he who knows the world renounces it," said al-Hasan al-Basri (II/8th century), one of the first Sufis. And the Prophet said: "In this world be like a stranger or a traveller". And ad-Din Attar declared: "Destroy yourself; therein lies perfection. Renounce yourself; this is the pledge of your union with Him. That is all". But renouncing the world does not mean shunning the world, as the XIII/19th century African warrior-philosopher al-Haj 'Omar has explained; "Asceticism does not consist in withdrawing from the world, but in banishing it from one's heart."

For renunciation is the result of a struggle waged amid the trials and temptations of ►

Photo Roland and Sabrina Michaud © Rapho, Paris

Above, portrait of the poet and Sufi (Islamic mystic) Yunus Emre, one of the great figures of Turkish literature. Little is known about his life. He was born around the middle of the VII/13th century, lived in Anatolia, and died c. 719 AH/1320 AD. Tradition has it that he was poor, of peasant origin, and belonged to a dervish religious fraternity. His work, written in Turkish, expresses deep feeling in direct, simple language. It marked a sharp break with that of the other writers of his age who were steeped in Persian culture and book-learning, and has had an enduring influence on Turkish lyrical poetry.

The Dream

"On a certain night, after completing the Prayers and liturgical recitations ordained for the hours of night, I continued to meditate. And lo! deep in ecstasy, I had a vision. There was a lofty *Khanqah* (house of Sufis); it was open; I was myself within the *Khanqah*. Then suddenly I saw that I had gone forth from it. I saw that the totality of the universe, in the structure it reveals, consists of Light. Everything had become one colour, and all the atoms of beings, through their own mode of being and their specific character, proclaimed: "I am the Truth". I could not properly interpret the mode of being which made them utter this proclamation. When I had perceived this state in a vision, rapture and exaltation, an extraordinary longing and delight, welled up inside me. I wished to take flight in the air. I noticed that at my foot was something resembling a piece of wood which prevented me from taking my flight. Carried away with emotion, I stamped on the ground in every possible manner until this piece of wood came away. Like an arrow shooting from a bow, or rather with a hundred times more force, I rose and flew off. When I reached the first Heaven, I saw that the Moon had melted, and I passed through the Moon. Then, returning from this state and from this absence, I came back to myself".

Shams al-Din Lahiji

Shams al-Din Lahiji (d. 911AH/1506AD) is a Persian mystic known for his commentaries on a classic of Sufism, The Mystic Rose Garden (Golshan-e raz) *by the great Persian mystic Mahmud Shabestari.*

this world against one's demanding self *(nafs al-amarrah)*, the "egoity" that men call Satan. This is the inner battle *(jihad)*, the Great Battle. And the Pakistani mystic Muhammad Iqbal (1877-1938) urges us to struggle ceaselessly:

Do not dally on the shore
where life's melody dies a gentle death.
Leap into the sea, fight with the waves,
for immortality is won through struggle...
Happy the man whose soul knows no repose.

Jami, author of two great love poems, *Layla wa Majnun* and *Yusuf wa Zulaykha*, maintains that passionate human love prepares man for Divine love: "If you would be free, be a prisoner of love. If you would be happy, open your heart to the suffering of love. The wine of love brings warmth and rapture; without it there is nothing but icy selfishness... You can pursue many ideals, but only love will deliver you from yourself. If you long for a draught of the mystic wine, sip first the wine of appearances".

Sultan Muhammad Aga Khan explains it admirably in these words: "He who is fortunate enough to arouse and feel the love of a human being should give himself up to it and respond gratefully, considering it a blessing and a source of pride... But, just as the joys of human love surpass all that wealth and power can bring to a man, so spiritual love and revelation—the fruit of this sublime perception, of this direct vision of Truth, which is a gift and a grace of God—surpass all that the deepest and most sincere human love can bring us."

"All paths lead to God," says Rumi. "I have chosen that of dance and music... He who loves, feeds his love by listening to music, for music reminds him of the joys of his first union with God".

The fact that the XIV/20th century has produced such great Muslim mystics as the Moroccan Ahmad al-'Alawi, the Pakistani Muhammad Iqbal, the Peul Tyerno Bokar Salif Tal, the Libyan Ahmad Zarruq and the Iranian Sultan Muhammad Aga Khan proves the extent to which mysticism is still alive today in Islam. And it will remain alive, as is stated in this *Hadith* of the Prophet Muhammad: "The world will always have forty men like the Friend of the Merciful (the prophet Abraham). Through them you will receive both food and drink."

■ **Rahmatullah**

Mystic voices

On this page we present two extracts from The Ilahi-nama *or* Book of God *by the great Persian mystic poet Farid al-Din Attar (Circa 537-627 AH/1140-1230 AD) translated into English by John Andrew Boyle. (The translation, with a foreword by Annemarie Schimmel, was published by the Manchester University Press in 1976 and forms part of the Unesco Collection of Representative Works). Doctor, pharmacist and perfumer, Attar (whose name means "He who trades in perfumes") wrote a prose work containing much information on the mystics,* Tadhkirat ul-Auliya *(abridged English translation,* Biographies of the Saints *1961) as well as several major works of poetry, notably* Mantiq-ut-Tair *(Eng. transl.* The Conference of the Birds, *1955) and* Mosibat-nameh (The Book of Affliction).

Zubaida and the Sufi

Zubaida was seated on a camel-litter, journeying auspiciously upon the Pilgrimage.

A gust of wind blew the curtain to one side: a Sufi caught sight of her and fell headlong to the ground.

He set up such a crying and commotion that no one could silence him.

Perceiving that Sufi Zubaida whispered to a eunuch:

"Free me quickly from his noise even though it cost thee much gold".

The eunuch offered the man a purse of gold: he would not take it, but when he was offered ten purses he gave way.

Having accepted the ten purses of gold, he ceased at once to cry and to utter pitiful moans.

Zubaida, perceiving the true state of affairs, that that Sufi had turned away from the mystery of love,

Told the eunuch to bind his hands and to break his seven limbs with blows of the rod.

He cried out: "What then did I do that I should suffer these endless blows?"

Said Zubaida: "O lover of thyself, what wilt thou do henceforth, liar that thou art?

Thou didst pretend to love such a one as I, and yet when thou wert shown gold thou hadst enough of loving me.

I have found thee nought but pretence from head to feet, and I find thy pretence to be false.

Thou shouldst have sought after me; since thou didst not I knew for certain that thou wert feeble in action.

Hadst thou sought after me, all my goods and property, all my gold and silver, would have been thine absolutely.

But since thou soldest me I resolved to punish thy ardour.

Thou shouldst have sought after me, O foolish man, and then all would have been thine at once." —

Fix thy heart on God and thou shalt be saved; if thou fix thy heart on men thou shalt be afflicted.

Close tightly to thyself all other doors; seek out His door and fix thy heart upon it entirely,

So that through the dark cloud of separation may shine the light of the dawn of knowledge.

If thou find that light thou shalt find also the way to knowledge.

The saints that raised their heads to the moon were guided by the light of knowledge.

Story of Bishr Hafi

Bishr Hafi was walking along early one morning drunk with the lees of wine and yet pure in his soul,

When he found lying in the road a piece of paper on which was written the name of God.

All he had in the world was a single grain. He sold it for musk. See what gain!

At nightfall that God-seeking man perfumed the name of God with his musk.

That night, just before dawn, he dreamt that there came a Voice to him saying:

"O thou who didst raise My name from the dust and with reverence didst both perfume and purify it,

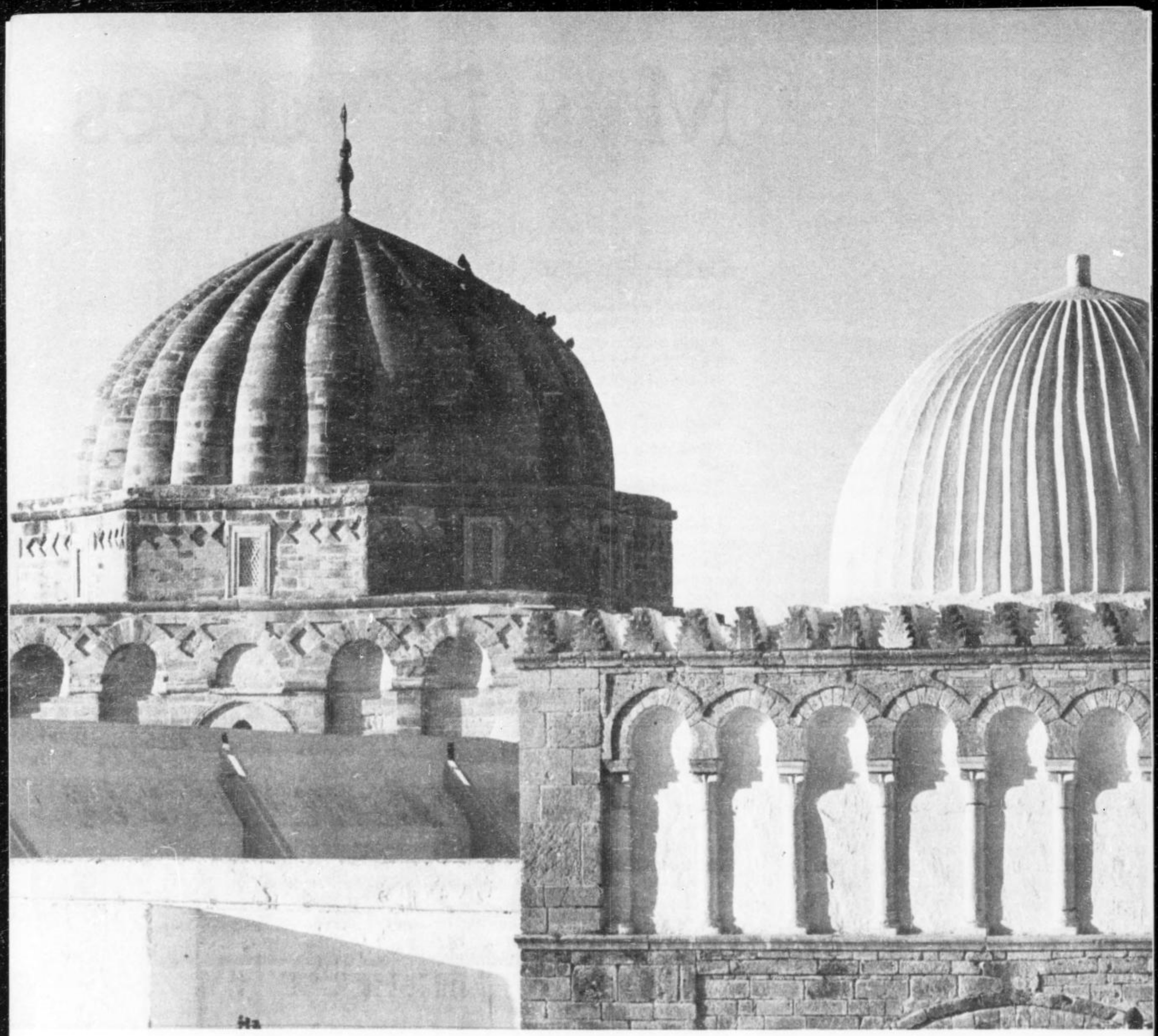
I have made thee a seeker of the truth; I have both perfumed and purified thee".

O Lord this sweet-singing 'Attar has perfumed Thy name with the perfume of his poetry.

And yet what though he sang sweetly? Thy name has always been perfumed.

Still by Thy grace make him the dust of Thy doorway; make him famous with Thy name.

He can expect nothing save from Thy grace, for he can produce not a single act of devotion.



A new architecture

by Dogan Kuban

WHEN Granada, the last Moorish stronghold in Spain, fell to the armies of Ferdinand and Isabella in 1492, its Spanish conquerors were so impressed by the beauty of the Alhambra, the palace of the Moorish monarchs, that they decided not to destroy it. Later, apparently, the Emperor Charles V found it unsuitable for an imperial residence. Alongside it his architect erected a palace which is accepted as one of the purest examples of Spanish Renaissance architecture.

The Alhambra and Charles's palace, standing side by side, allow us to make interesting comparisons. It is evident, for example, that certain architectural qualities which were so perfectly expressed in the Alhambra and which still retain their fascination today, were far outside the frame of mind of Renaissance Europe. Today however it would be impossible to imagine the land of Spain without the Alhambra or the Great Mosque at Cordoba, and the vision embodied in them, which totally eclipses that of Charles's palace.

The Alhambra holds more than an exotic appeal. Extremely well adapted to the climatic and topographical conditions of the hills of Granada, it appears to the visitor as an organism of masterfully arranged, interconnected spaces of rare elegance. An original feeling for the organization of space and for dimensional relationships, and an exquisite use of decoration, bear witness to the refined taste of a cultural milieu which is formally in open contrast with that of IX/15th and X/16th century Europe. Long disdained by European art history and labelled "decorative", this architecture in which the most profuse decoration scarcely interferes with the purity of architectural design has a strong appeal for modern taste.

DOGAN KUBAN, *noted Turkish architect, educator and historian of architecture, has been director of his country's Institute of the History of Architecture and Restoration since 1974. He has been a visiting scholar or professor at several U.S. universities, most recently in 1980-1981 when he was Aga Khan Visiting Professor of Islamic Architecture and Urban Design at the Massachusetts Institute of Technology. He is a member of the Steering Committee of the Aga Khan Award for Architecture.*

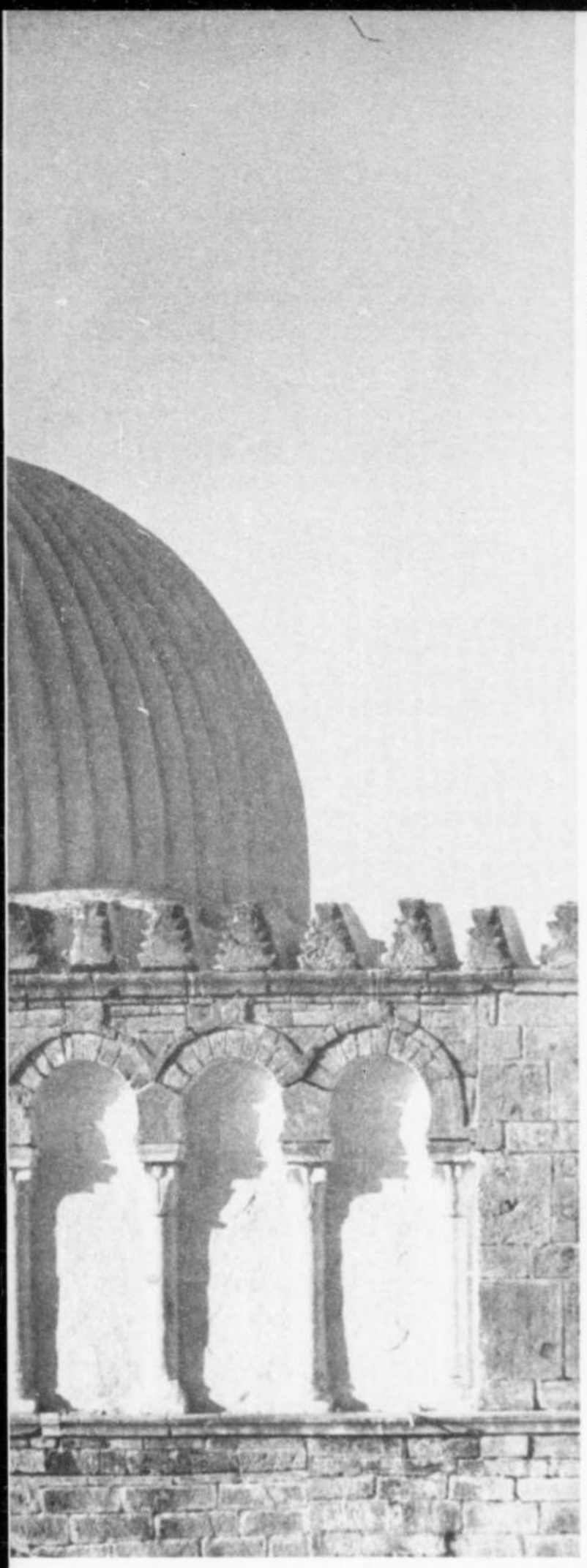


Photo © André Martin, Paris

Left, ribbed domes of the great mosque of Qayrawan (Tunisia). The blind arcade in foreground displays typical Arab features, notably the horseshoe arches which reappear in the illustration (below) to Beatus' *Commentary on the Apocalypse*, a brilliant example of what is known as Mozarabic art. The Mozarabic style was created by the Christian population which continued to practise their religion under Muslim rule in Spain and combines elements from the two civilizations.

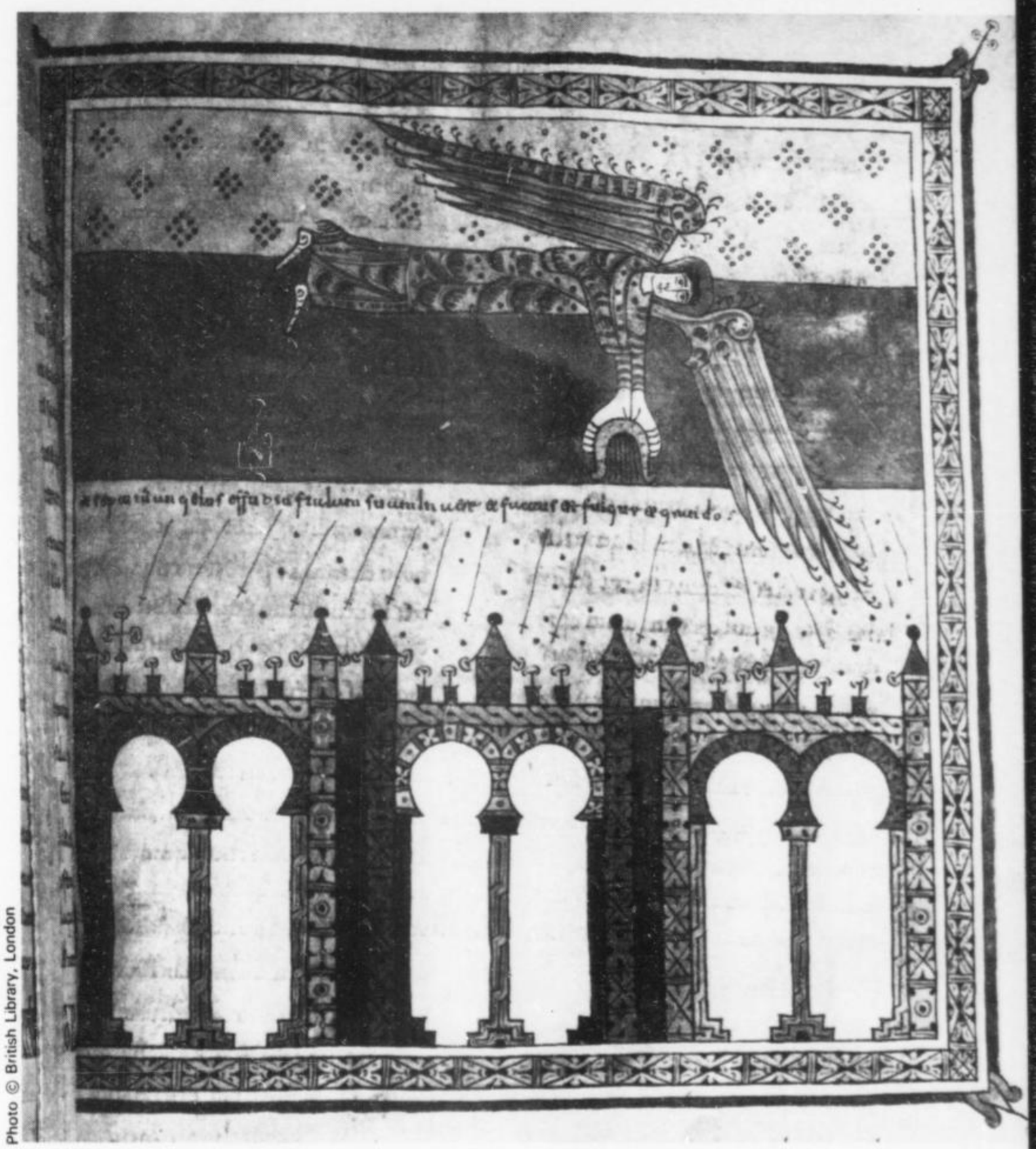


Photo © British Library, London

rooted in tradition

What can be seen at the Alhambra can also be perceived in the products of many architectural traditions in Islamic countries. But so slight and superficial is the knowledge of Islamic architecture that has reached modern intellectuals, including Muslims, that for today's generation of Muslim architects the exploration of their architectural past is a veritable revelation.

Most of today's architectural thinking, education and practice, basically formulated after World War I, takes place under the spell of the industrial ideology of the Western world. This ideology has also been overwhelmingly adopted by the ruling classes of the non-Western world. As a result it is often difficult to discuss the values of traditional architecture and the traditional environment without being labelled a historicist, a traditionalist, and a lover of the picturesque, if not a reactionary.

Although the traditional outlook may subsist and colour many political attitudes, a strong dichotomy prevails between the acceptance of a general set of spiritual values and the acceptance of specific values governing our appreciation of the material culture of the past. Nevertheless, nothing can escape the continuous reshaping power of history as long as different languages, beliefs, social systems and national sentiments exist. And this process is bound eventually to generate a sympathetic approach to the values of the material environment.

Thus a new interpretation of the nature of the traditional Islamic environment is bound to influence, negatively or positively, the practical attitudes of Muslim architects. The realization that an appropriate environment cannot be created simply by the transfer of industrial ideology and the importation of techniques and materials is gradually replacing the romantic belief in the universalism of early rationalism. On the other hand, although theoretically the tenets of the international style in architecture have fallen into disfavour, they still constitute the entrenched ideology in architectural practice. Muslim architects are thus caught up in a dilemma between the demands of a practice based on Western images and the exigencies of a national identity and a cultural heritage of great power.

There are two imperatives: on the one hand the wider necessity of reinterpreting Muslim history, and on the other the need to search for a different image of the modern environment in the Islamic world. The former is a task for the scholars and intellectuals of Islam; the latter for the architects, designers and planners. A new vision of ►

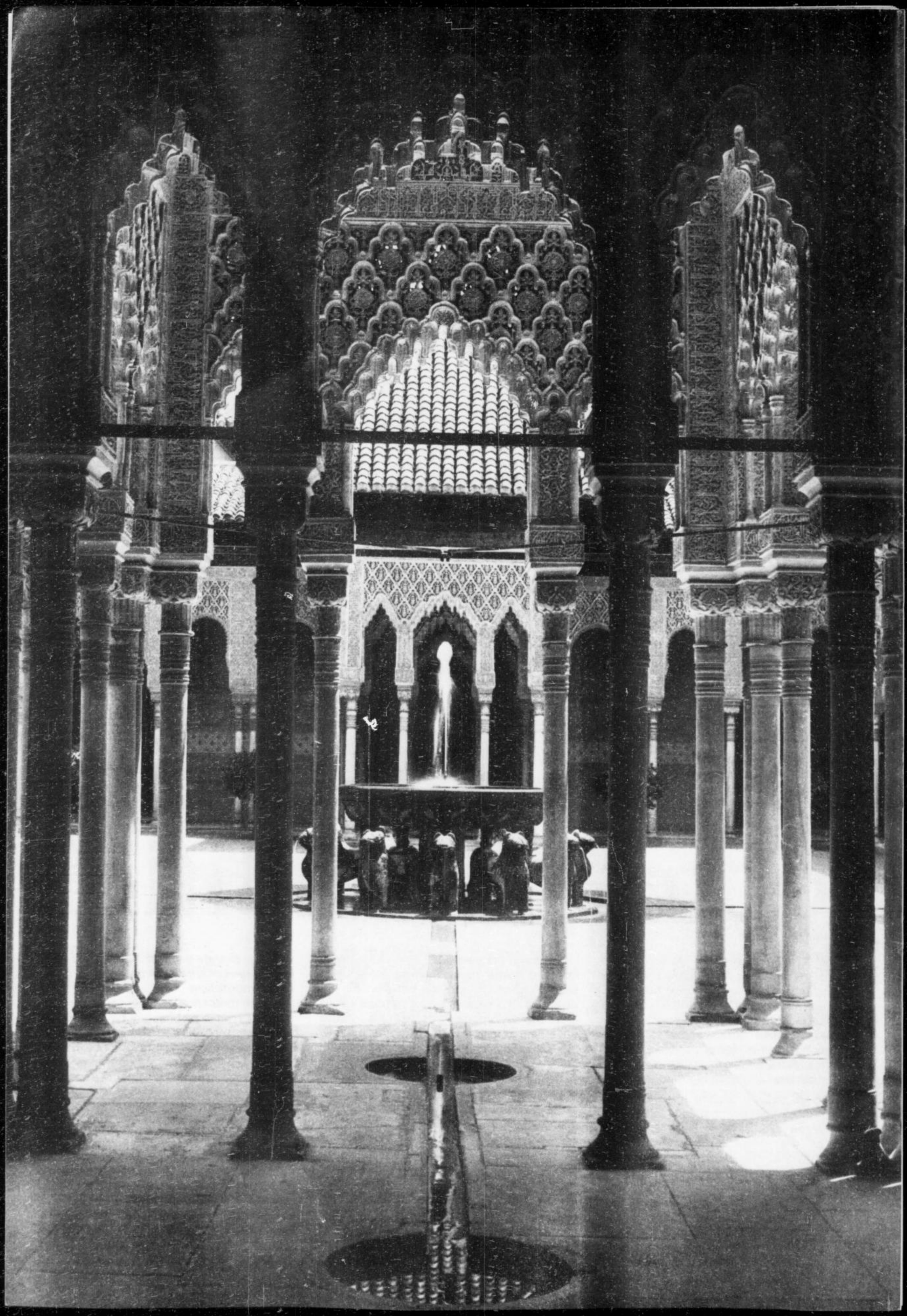


Photo Yan © Rapho, Paris

Light and water play an important role in Islamic architecture. Caught and reflected on stucco or enamelled tile surfaces, light dispels heaviness and brings a spiritual, incorporeal quality to brick and stone. Water is a source of coolness and a symbol of purity, and a small fountain or pool in a central courtyard is often the focal point of palaces and other Islamic edifices. The subtle interplay of light and water is particularly remarkable in the Court of Lions, left, in the Alhambra Palace (VIII/14th century) at Granada in Spain. The court, whose walls are lined with enamelled tiles and delicate stucco-work, owes its name to the 12 marble lions which support the fountain in its centre. The garden was also an expressive art form in Islam. In the Moghul painting, below, Babur (IX-X/15th-16th century) the founder of India's Moghul dynasty, inspects a garden where water channels are laid out in a characteristic cruciform pattern.

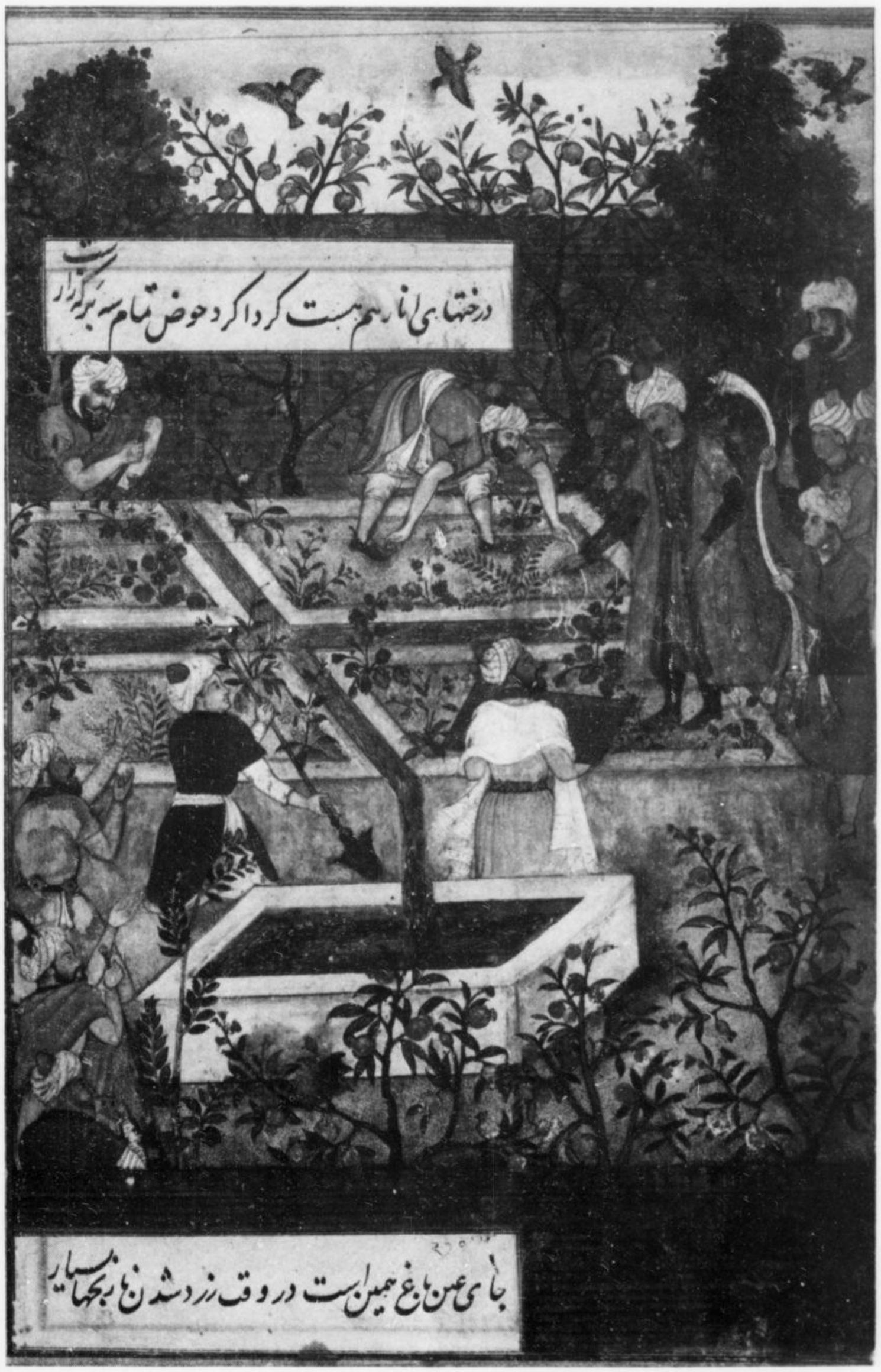


Photo © Victoria and Albert Museum, London

history will have major implications in every field, including that of architecture.

Architects express the material dimensions of an existing image of the world, but they do not produce that image themselves. It is to be hoped that a new consciousness of the relationship between man and his environment, filtered through this new vision of history, will create the intellectual and emotional atmosphere to which Muslim architects will eventually respond with appropriate inventiveness.

It is generally acknowledged by recent historiography that the modern version of Islamic history, like that of the history of the non-Western world in general, has been written by Westerners as an appendix to Western history. A radical reinterpretation of history will not only bring to light the Islamic world-view in its many regional expressions, but also its global relationships, sometimes in symbiosis, sometimes in contrast, with other, non-Islamic traditions. This will also change our evaluation of Muslim artistic traditions. The study and understanding of the rich variety of traditional experience in handling form and space, be it the monumental styles of Spain, Egypt, Turkey, Iran, or the Indian subcontinent, or the amazing richness of indigenous settlements in an area stretching from Morocco to the Philippines, might give modern generations of architects the possibility of understanding certain formal relationships which are perhaps still valid, at least as sources of inspiration for the creation of a new image of the human environment.

The development of new concepts and perspectives with such goals and dimensions is difficult since it has to take place against a background of rapidly changing perceptions of national histories, in the presence of the strong traditions of Western scholarship, and under pressure from the overwhelming output of Western publications. If, as has so often been observed, Muslim intellectuals and architects incorrectly interpret and evalue the material heritage of their own history, this was and still is the result of the established attitudes of Islamic art history, in which Islam is portrayed in its medieval garb, as a museum piece.

The surviving environment, in accordance with this view, is seen as a hindrance to a rational development, that is development which adheres to models imported from or imposed by the West. (This insistence on the negative influence of the West should not be interpreted as an overall attack on everything Western, but as an indication of a new consciousness of history and a refusal to imitate blindly everything offered by the West. The subtle balance between borrowing and interpretation may only be achieved through an objective re-evaluation of the past.)

As far as our environment is concerned, the Western image has not necessarily produced better living conditions, and has disfigured or totally destroyed old cities such as Cairo, Istanbul, Teheran or Jeddah which had, as we appreciate more fully today, sound ecological qualities. Examples of destruction are alarming and discouraging, not only because of their extent, but because of their brutality and lack of sensibility.

Photo © Yvette Vincent Alleaume, Paris

The capital of the Ottoman empire, Istanbul, was once an example of exquisite urban architecture. Today it contains the most banal examples of modern architecture. Neither modern technology at the level at which it is used, nor the culture of the society in question are capable of producing an architecture of decent aesthetic quality, because the transition from one culture to another has been too sudden to allow the crystallization of a clear set of definitions and goals.

The cases of Istanbul and other great centres of the old Near East such as Cairo, Damascus and Jerusalem are very instructive, because Western taste in architecture was introduced in these cities as early as the XII/18th century if not before.

The destruction and loss of character of the traditional environment is not intrinsically the result of modernization, but rather the outcome of an inability to realize and reconcile the imposed image of a city, its architecture and the life-style which goes with them. That this image was not universally applicable is another matter. Our societies do not have the potential, whether economic, technological, cultural or social, effectively to produce and maintain this image which was not theirs. The relationship between the image and its potential realization cannot be expressed by a mere equation, as it is often simplistically claimed.

The environment of the past has, nevertheless, remarkable powers of survival. Despite the drastic destruction of recent decades, the traditional environment, especially in rural and semi-rural areas, still has a reasonable chance of remaining with us for some time to come. There is a growing tendency for Muslim architects to evaluate and use the traditional building stock, monuments and settlements as part of a modern environment in which the old and the new are integrated, in which changes occur at a perceptible but less rapid pace, and in which Muslim societies do not lose the thread of history. It is perhaps the responsibility of the present generation to express these aspirations. But in the present circumstances of rapid change, especially in countries where the natural resources at the disposal of governments seem limitless, the fight for a more controlled development and a slower rate of change, thus respecting history and harmonizing with the remnants of traditional culture, is beset with many difficulties.

Given the impact of industry, the monopolizing and levelling effects of world politics and communication systems, and the needs of large sections of the world population, the role of architects and planners in defining a new image may only emerge from an awareness of the cultural dimensions of the present situation. We should continue to emphasize the principle that the possibility of creating a healthy environment depends not on the capacity to buy Western technology, but on a potential inherent in the cultural and social structure of the society.

Photo © Ch. Bastin and J. Evrard, Belgium

In Islamic countries from the Atlantic to the Ganges, a distinctive architectural "language" came into being and developed over the centuries. It was based on a common faith and civilization and transcended geographic, cultural and climatic diversity. Far from jettisoning earlier cultural traditions, Islam assimilated and transformed them, producing works of monumental architecture prodigious both in quality and number. The extent of this achievement can be measured not only in mosques but in many other types of building such as *madrasahs*, mausoleums, observatories, palaces, citadels and caravanserais. Islam also made a notable contribution to town planning. On these pages, roofscapes from three countries. Left, rooftop of the mosque at Djenne (Mali) an old trading city and centre of Islamic culture founded in the VII/13th century. The mosque dates from 1905. Above, housetops of the village of El-Mahder (Algeria) as they appear from the roof of the village mosque. Below, undulating rooftop of the bazaar at Yazd (Iran).

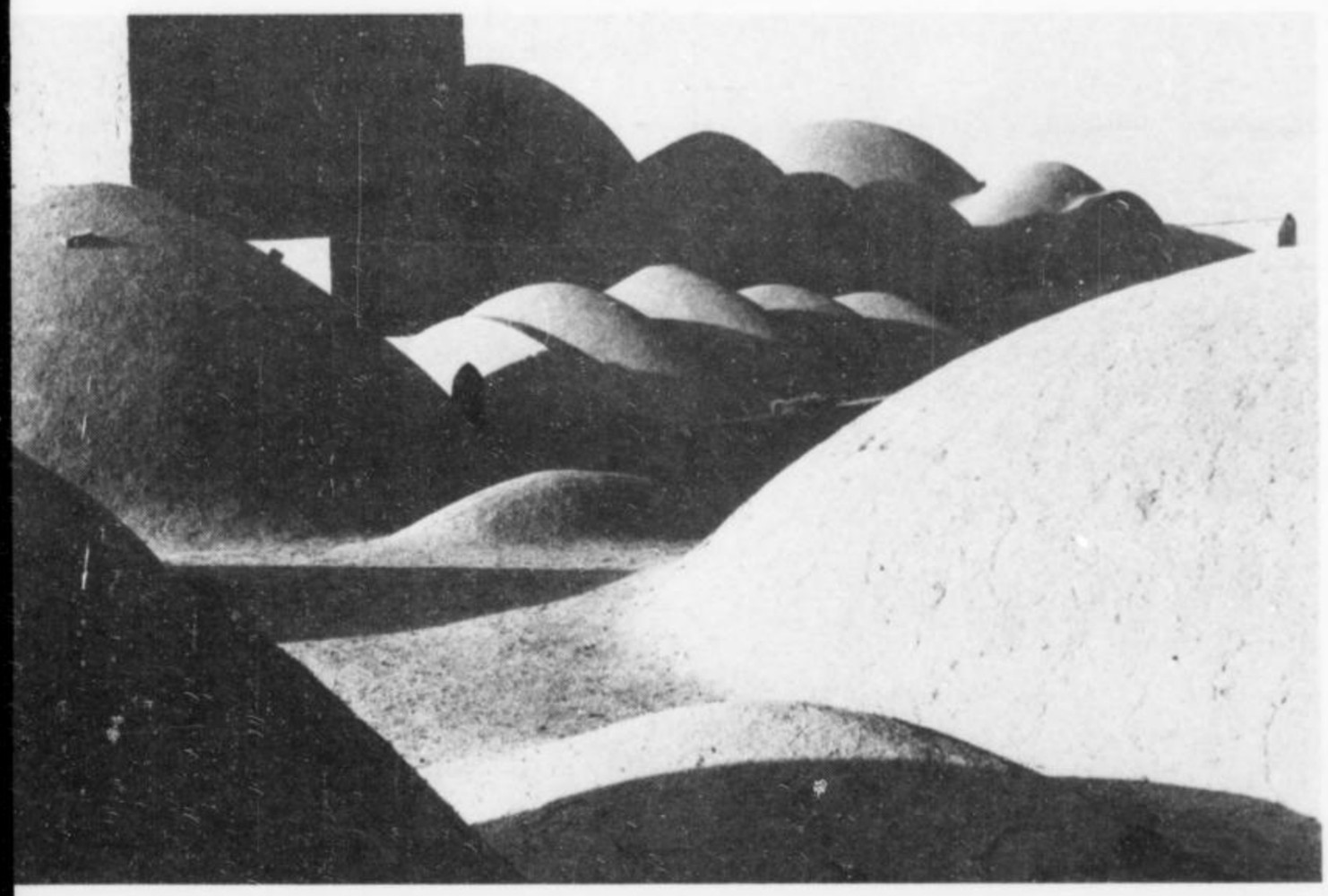


Photo © André Stevens, Winksele, Belgium

How can all these questions, anxieties and aspirations be translated into everyday forms of architecture? How can a feeling for the traditional environment and forms perceived by an architect be expressed in a modern building? Since the terms *traditional culture* and *modern environment* are susceptible to interpretation and subject to continuous change, their relationship can only be defined by practice. Theoretical discussions cannot determine universally applicable Islamic forms, but they may perhaps give shape to certain attitudes which may help to attain such forms in their specific cultural context, which will most probably vary from region to region.

Recent debates on modern architecture and town planning in Islamic countries, such as the seminars sponsored by the Aga Khan Award for Islamic Architecture, conferences on the Islamic city held in many Arab countries, and symposia sponsored by international agencies such as Unesco, have shown that it is extremely difficult, even hazardous, ►

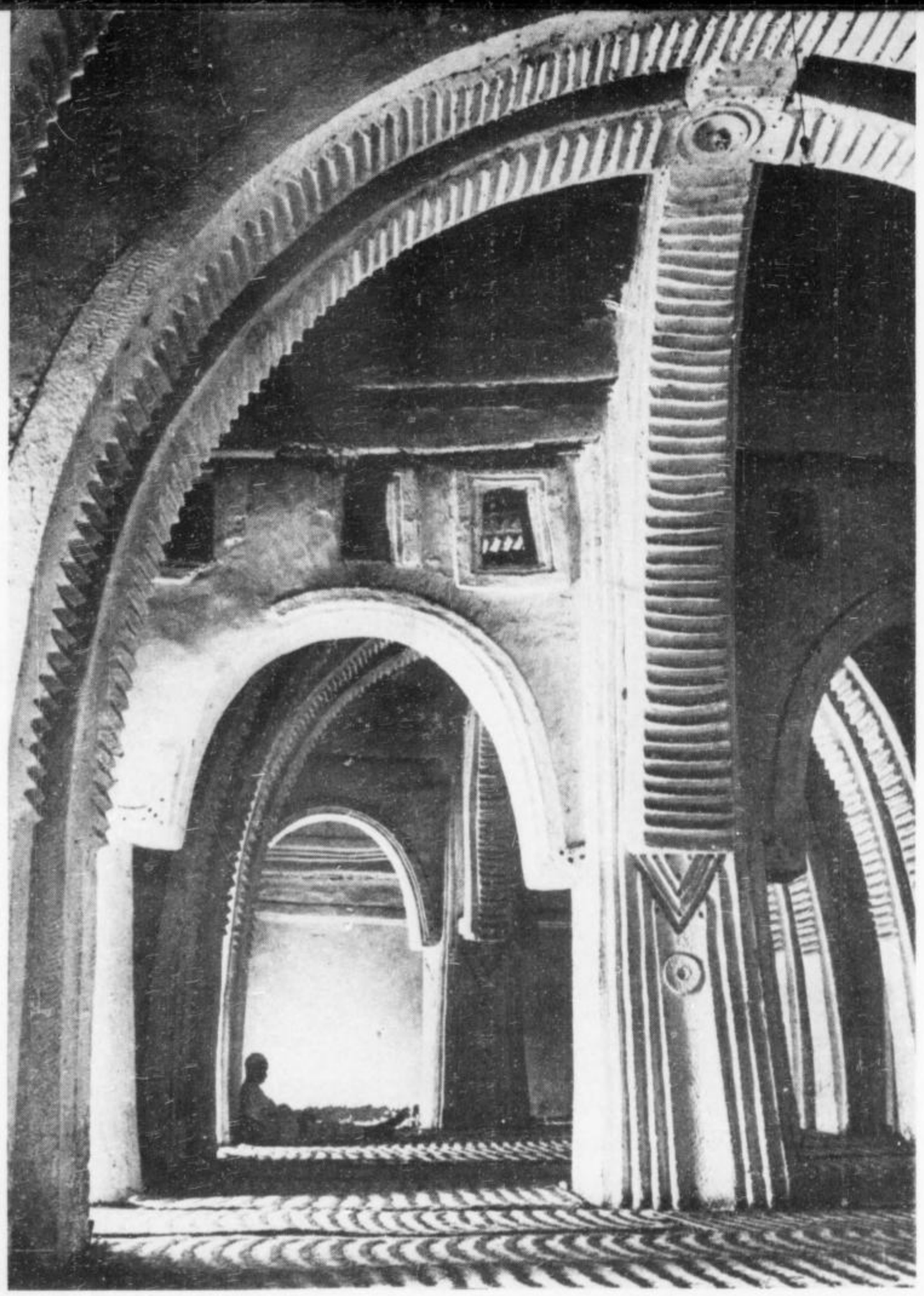


Photo © Allan Leary, Birmingham U K.

Photo Georg Gerster © Rapho, Paris

Left, the Friday Mosque at Zaria (northern Nigeria). Founded in the XI/17th century, Zaria is the ancient capital of the Hausa kingdom. Right, inside the prayer hall of the great Umayyad Mosque at Damascus, completed around 97 AH/714-715 AD. The horseshoe arches rest on tall slender columns revealing the influence of classical antiquity.

► to define in physical terms a modern environment consonant with the traditional culture.

Some individual examples may convey such relationships, but they cannot provide formulae which may be applied elsewhere. The works of architects who make conscious efforts to solve these problems basically refer to formal elements taken from traditional architecture and the traditional environment. They emphasize the virtues of indigenous buildings, the work of anonymous builders, whose qualities still capture the imagination. This may be called a search for an architecture in the spirit of Islam, Islam defined as cultural tradition.

This trend is best represented by the now-famous Egyptian architect Hassan Fathy and others sharing the same approach. It is a belief that a broad but sensitive application of traditional forms and design principles is conducive to healthy modern architecture. Hassan Fathy has put it as follows:

"...people do recognize and wish to remedy the cultural confusion in our architecture... This confusion is seen as a problem of style, and style is looked upon as some sort of surface finish that can be applied to any building and even scraped off and changed if necessary... In the architectural schools they make no study of the history of domestic buildings, and learn architectural periods by the accidents of style... Thus the graduate architect believes this to be all there is in 'style', and imagines a building changes its style as a man changes clothes."

Here *style* is used synonymously with *monumental style*. Hassan Fathy emphasizes the importance of the vernacular and the organic relationship between style and culture. As a matter of fact, a compe- ►

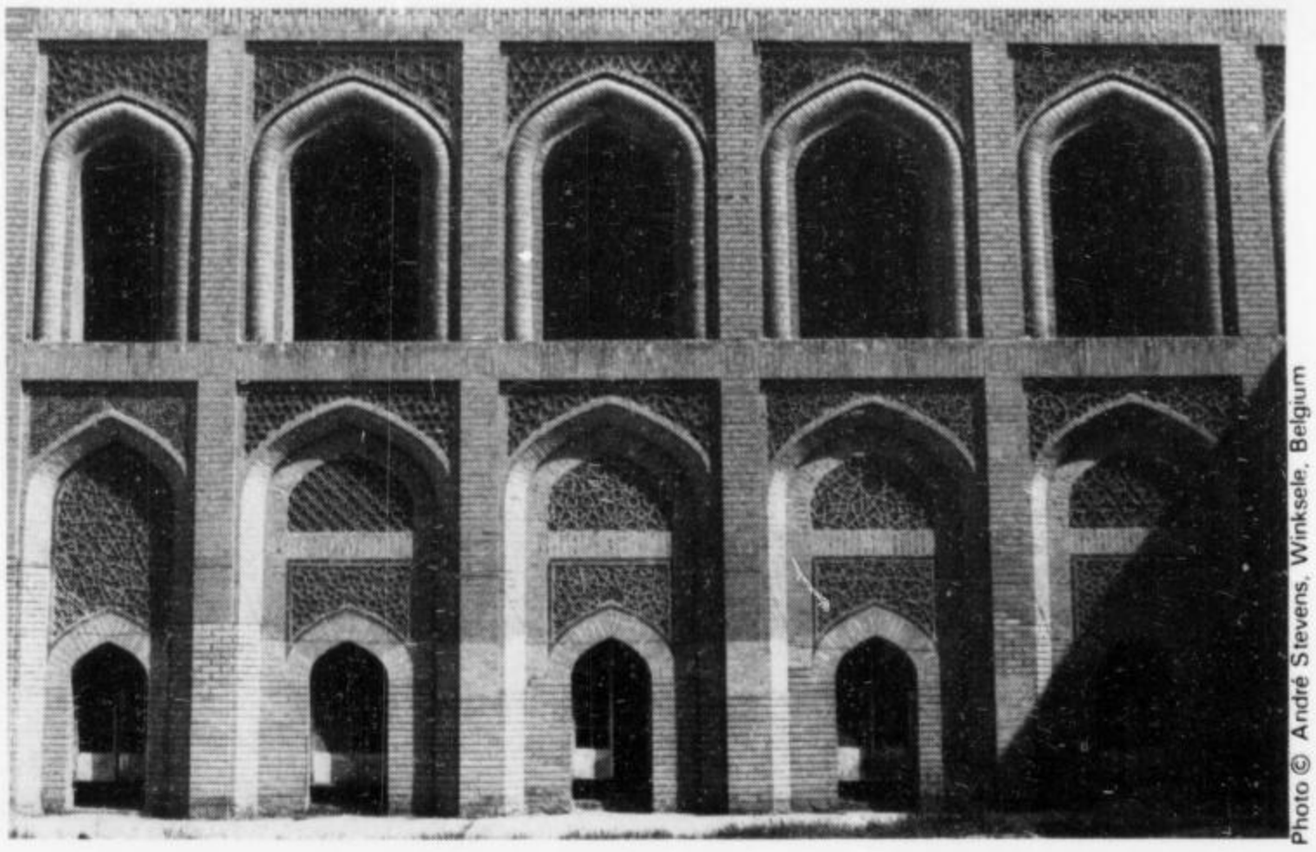


Photo © André Stevens, Winksele, Belgium

Detail of a façade of the Mustansiriya madrasah in Baghdad built under the Abbasids (VII/13th century). It displays a strong Persian influence and the decorative patterns based on octagons, six- and eight-pointed stars, and other geometrical motifs are characteristic of Islamic art.

tent and conscious use of traditional forms with the partial integration of modern techniques may lead to satisfactory aesthetic solutions and provide modern comfort. The Halawa house at Agamy, Egypt, which recently won an Aga Khan Award for Architecture, is a case in point. But one must confess that this building could easily be labelled "elitist". It is only in the rural context and with a complete use of traditional techniques that this approach has any chance of being adopted. Under today's economic restraints, to rely on old building techniques for new purposes is a challenge for architects, since traditional technology still prevails in many regions of the Islamic world and seems economically rewarding. Here too, the Gourna village experiment of Hassan Fathy, the subject of his book *Architecture for the Poor,* was a pioneering example.

A large group of architects have found that a rather free use and interpretation of tradition without resorting to the original forms themselves is a satisfactory approach to design. Both modern and traditional materials may be used for this purpose. A still unfinished project, the Great National Mosque at Islamabad, the work of the Turkish architect Vedat Dalokay, is a large-scale example of this trend at its freest. André Ravereau's Health Centre at Mopti (Mali), which has also been awarded an Aga Khan Prize, is a highly qualified illustration of the same approach on an everyday scale. Nevertheless, for most architects, an architecture in spiritual continuity with the past means incorporating formal echoes of the past.

Traditional forms have not yet been satisfactorily used in large-scale buildings, and it is impossible to maintain that they ever will be, because there is a fundamental difference between the application of traditional forms to small buildings and their use in large ones. The monumental "accent" of our environment has changed. Monumental architecture has a different symbolic resonance when it is not related to religious or political requirements.

A project such as the new Jeddah airport or a project once proposed for the city centre in Tehran, like many new university campuses all over the Islamic world or large-scale housing schemes, illustrate the powerful symbolism of the new functions but also reveal the anarchy of taste prevailing in the minds of designers, Muslims and non-Muslims alike. The same confusion is to be observed in urban renewal projects where planners insert space concepts of Western origin into the existing urban fabric, with fatal results. Such projects include the renewal of the city core of Mashad around the shrine of Imam Reza, speculative destruction of the old city of Istanbul, destruction of old Jeddah and Mecca. These should not be interpreted as individual failures. They might even, in some ways, represent competent planning. But what is missing in all these endeavours is the basic sureness of an architect or planner in complete harmony with his society, and a society which has clearly formulated the demands it wishes to make on them.

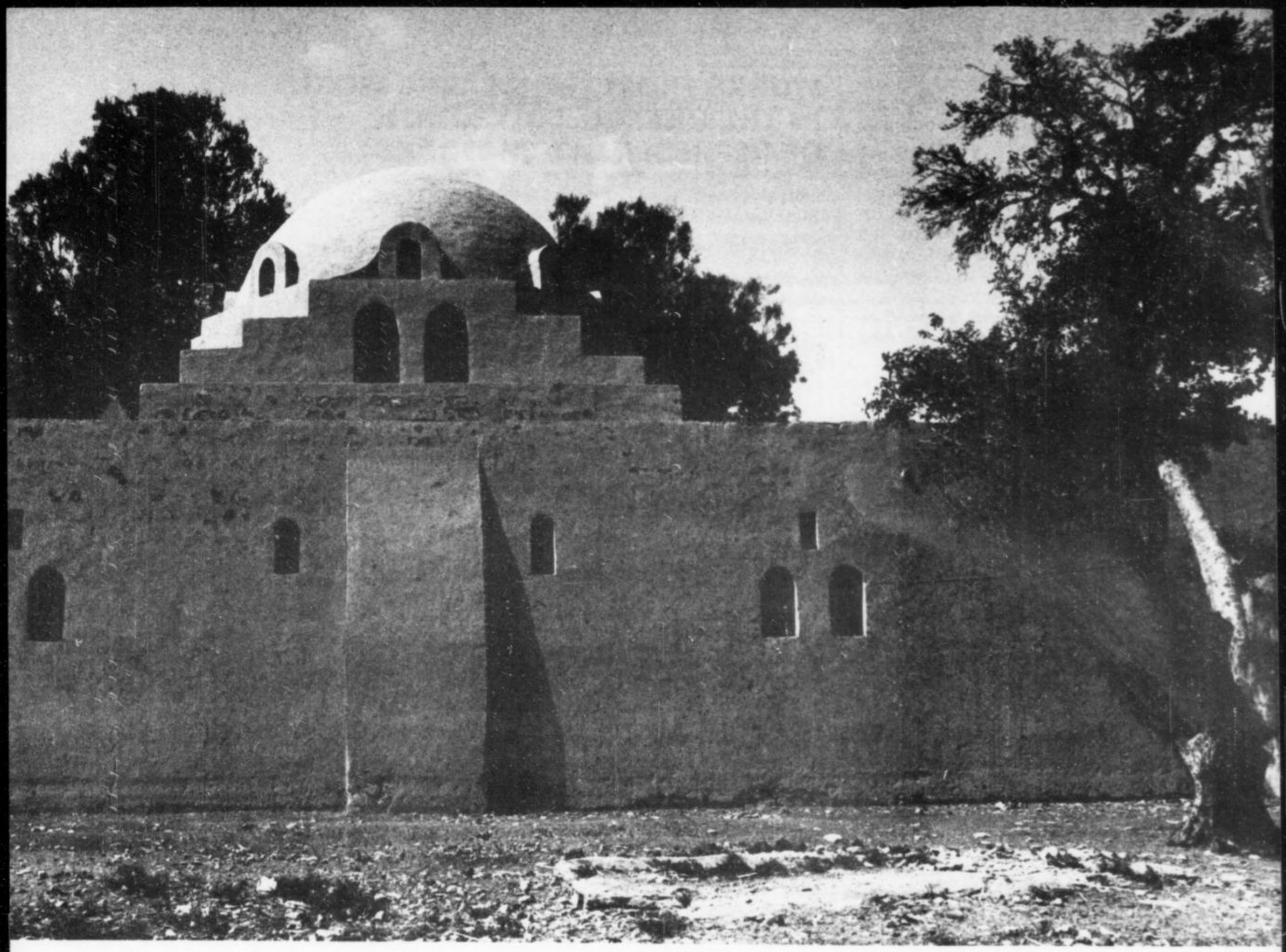
In the continuous flux of life, respect for the past cannot be a static reverence; it requires a dynamic interpretation. Thus modern development in Islamic countries brings architects more responsibility than has been customary until now. They are not only supposed to be sensitive to the structure and inclinations of social forces but also to be equipped with a responsible understanding of culture and history.

In developing a new image for a future environment, through an enriched vision of history and within a vision of future cultural plurality, the link between theoretical thinking and everyday practice cannot be maintained by the efforts of architects, planners or scholars alone, but through the demands of a public opinion increasingly aware of its cultural identity within an unbiased historical perspective.

■ **Dogan Kuban**

Photo © Aga Khan Award for Architecture, Geneva

The Agricultural Training Centre at Nianing, Senegal, a regional training school for 80 students, received one of the 1980 Aga Khan Awards for Architecture. The application on a larger scale of a prototype developed by Unesco, it was constructed by local craftsmen using a labour-intensive building system.



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In 1976, the Aga Khan announced the creation of an award to encourage an architecture in the spirit of Islam which would honour projects that met modern needs whilst remaining in harmony with local culture and climate. The first awards were made in 1980, when fifteen projects were honoured by a distinguished jury of architects, planners, sociologists and art experts. In addition, the Egyptian architect, artist and poet Hassan Fathy was honoured by a special Chairman's Award in acknowledgement of his life-long contribution and commitment to architecture in the Muslim world. A champion of indigenous building, he has shown, particularly in the village of New Gourna, near Luxor, Egypt, that mud brick structures can be graceful and economical to build and are admirably suited to the climate, as witness the mosque of New Gourna (above). Left, street scene at New Gourna.

CONTINUED FROM PAGE 29

Qur'an, Rakmatulla-kori Kasymov from Andizhan, in the Uzbek Soviet Socialist Republic, was named as one of the best reciters in the whole Islamic world.

Following the example of the Prophet Muhammad (Peace be on Him), who combined prayer and meditation with active service to his land and to all mankind, the Muslims of the Soviet Union combine service to Allah and the observance of religious rites with due and conscientious fulfilment of the social obligations deriving from their sacred duty towards the people of their country and to all men.

The World Muslim Congress has published a number of pamphlets on Islamic teachings in the modern world. One of them, dedicated to the *Daruriyat Sitta*, the six basic requirements of Islam concerning food, clothing, housing, education, health and security, stresses in particular that "It is the duty of every Muslim State to guarantee the satisfaction of these basic needs for all its citizens, both Muslim and non-Muslim." A Muslim State which does not do so, says the author of this pamphlet, fails in its Islamic duty. On the other hand, if the policy of a non-Muslim State conforms to the six basic requirements of Islam, points out the author, it fulfils to a considerable extent the tasks inherent in Islam.

One cannot but agree with this point of view. Indeed, a non-Muslim State which, like the Soviet Union, grants its Muslims freedom of religion so that they can adhere to its canons and helps them rise to the level of modern civilization from a state of political dependence and economic backwardness does greatly contribute to the goals of Islam.

■ **Ziyauddin Khan Ibn Ishan Babakhan**

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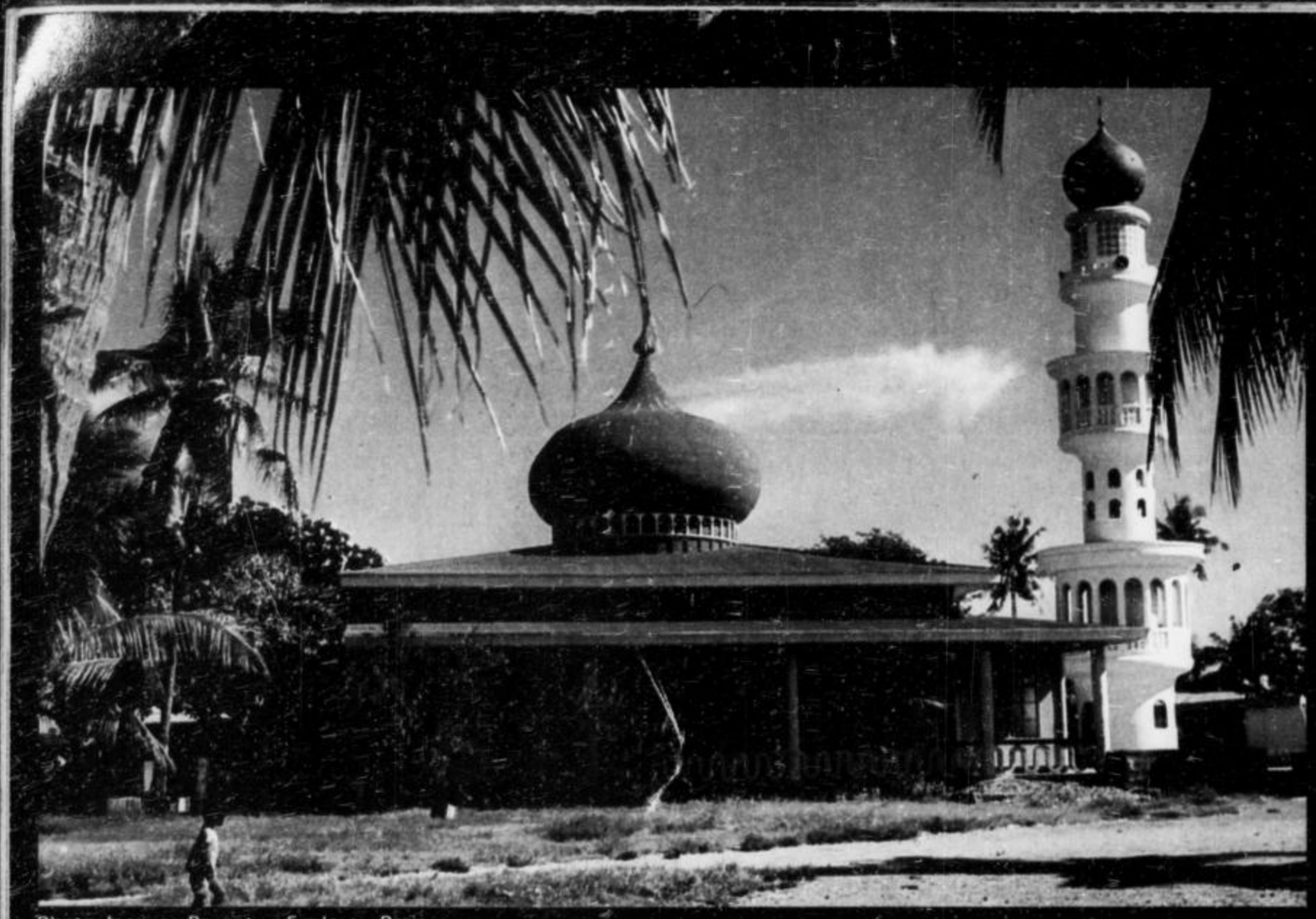

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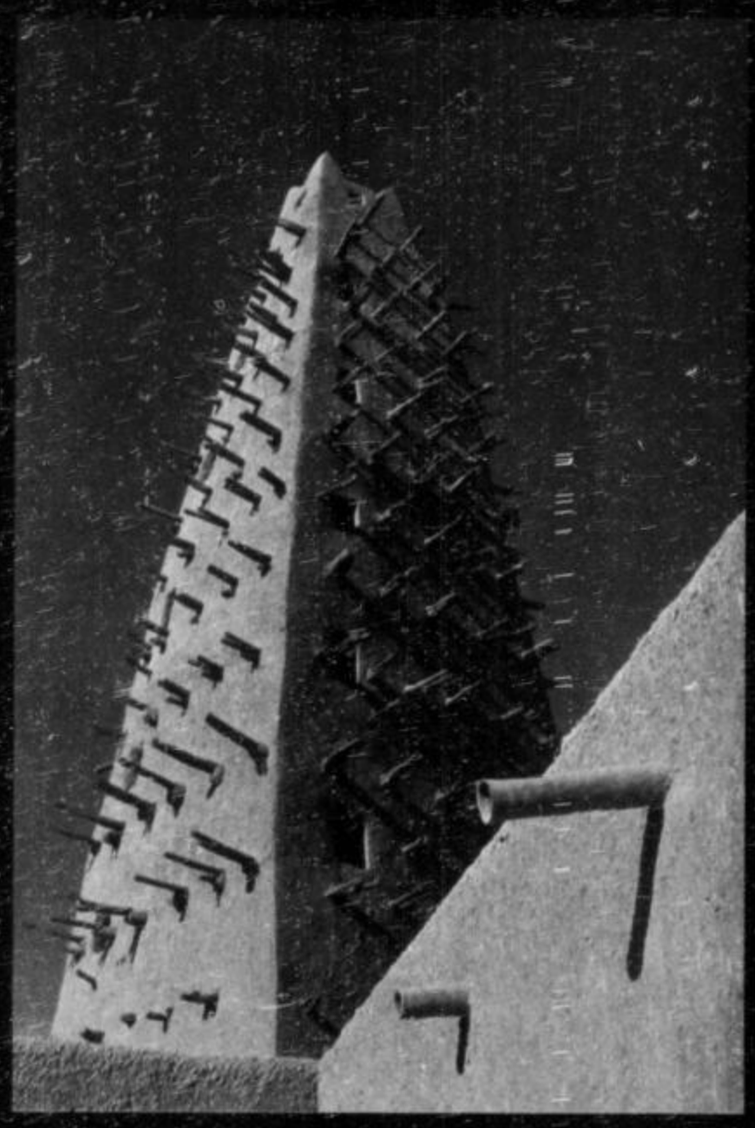

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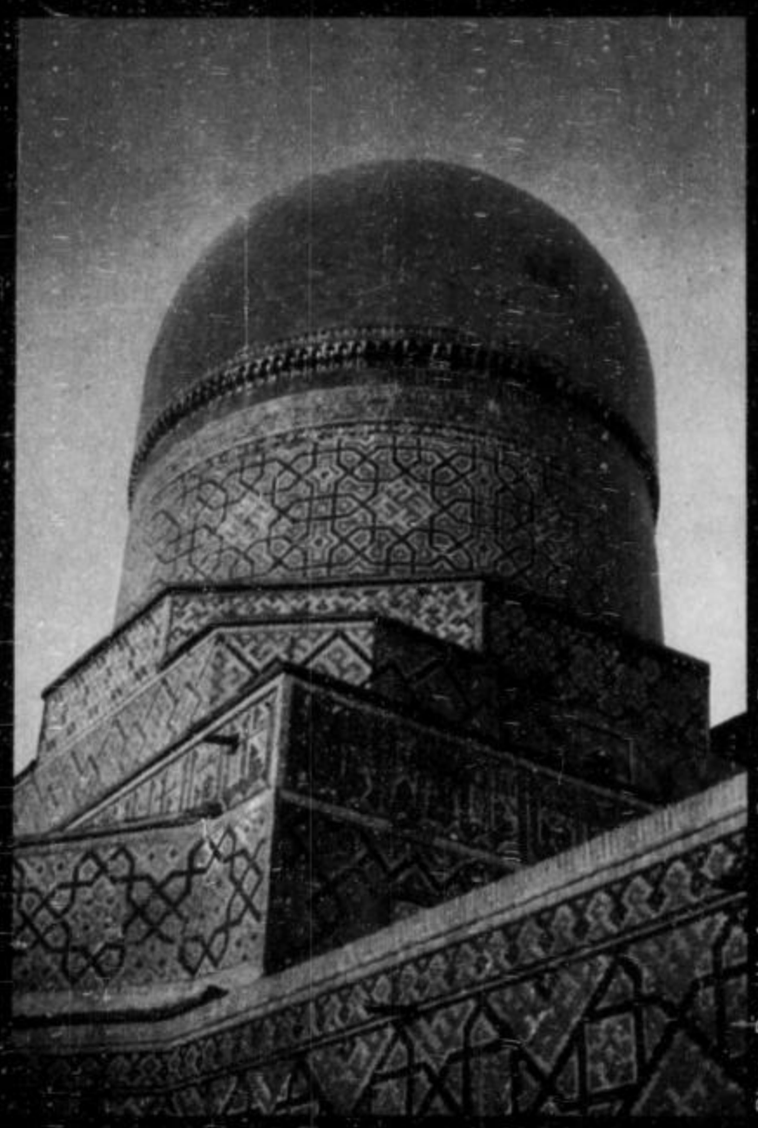

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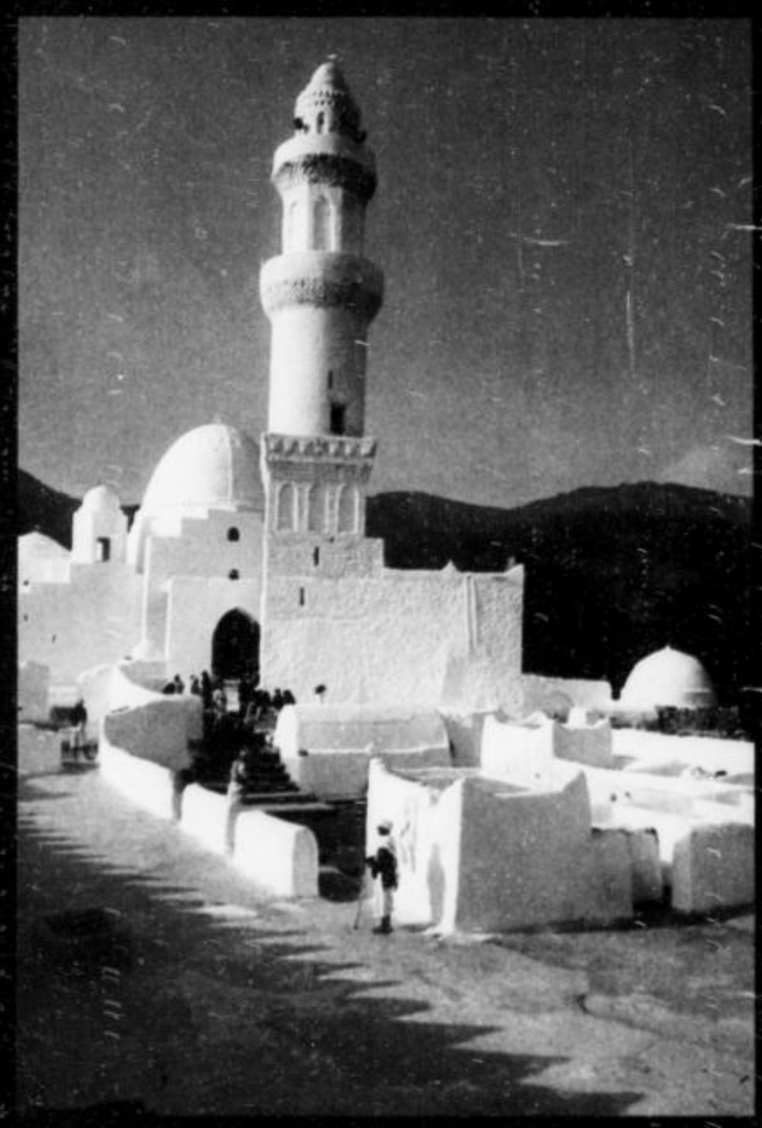
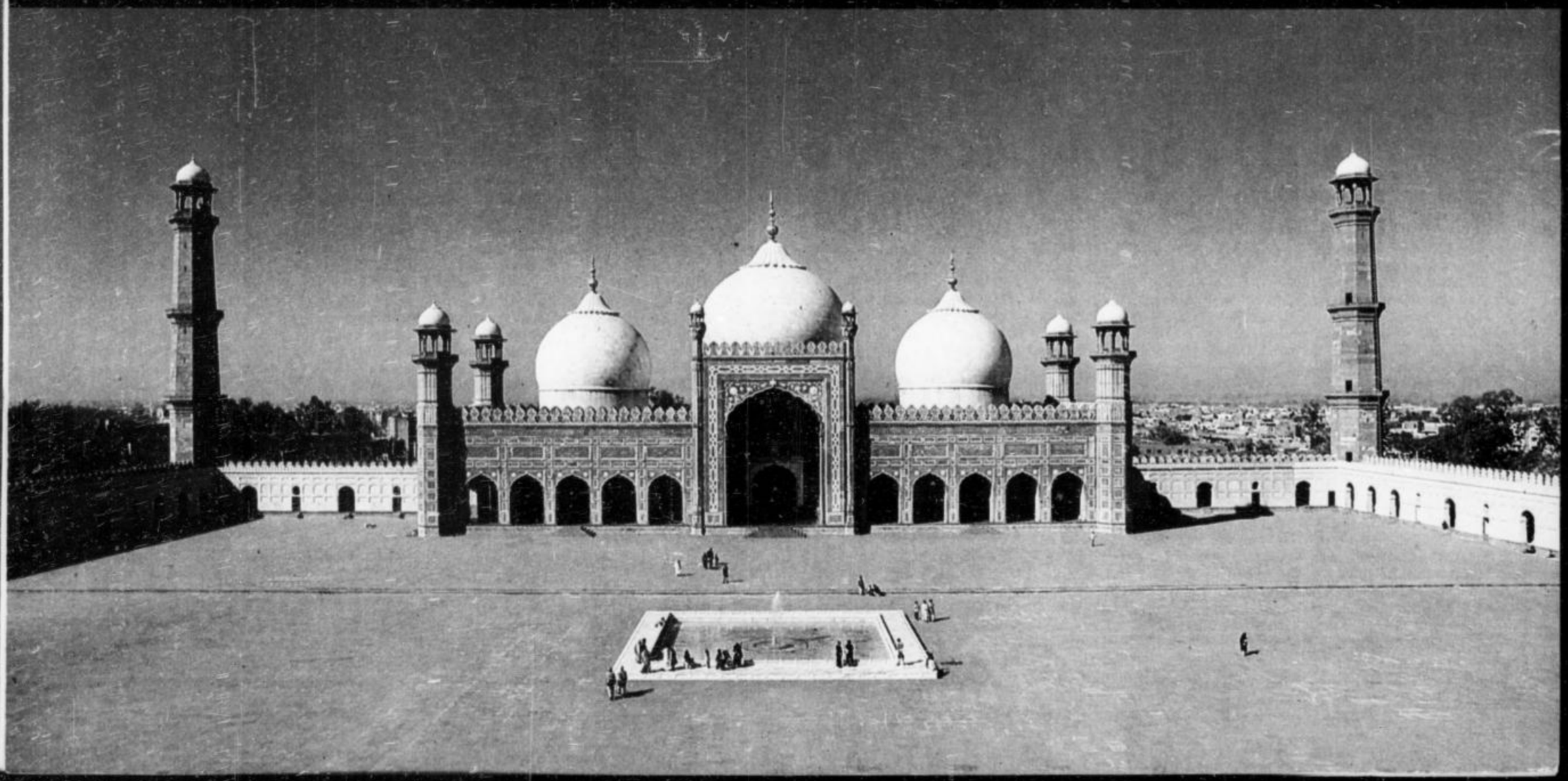
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